



# Installing Cisco VIM through Cisco VIM Insight

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The VIM Insight has an UI admin, who has the privilege to manage the UI offering. The Insight UI admin, has the rights to add the right users as Pod administrators. Post bootstrap, the URL for the UI will be: [https://br\\_api:9000](https://br_api:9000).

The following topics helps you to install and configure Cisco Virtual Infrastructure Manager with VIM Insight:

- [Registering New Pod to Insight , page 1](#)
- [Configuring OpenStack Installation, page 11](#)
- [Post Installation Features for Active Blueprint, page 49](#)

## Registering New Pod to Insight

In this step the user registers a new pod.

### Before You Begin

UI Admin has to register a Pod Admin to allow the user to access a pod. Following are the steps required for UI Admin to register a Pod Admin:

- 
- Step 1** Login as UI Admin and navigate to **Manage Pod Admin(s)** page.
  - Step 2** Click **Add Pod Admin**.
  - Step 3** Enter the Email ID of the user.
    - a) If email is already registered then Username will be populated automatically.
    - b) If not registered, an email would be sent to the user Email ID.
  - Step 4** Navigate to [https://br\\_api:9000](https://br_api:9000).
  - Step 5** Click the Register Management Node Link
    - Enter the Endpoint IP for the management node. Run time validation will check if the endpoint is already registered.
    - Give the name or tag for the particular management node
    - Enter the REST API Password (REST Password is present on the Pod at `"/opt/cisco/ui_config.json"`)

- Provide the Location and the brief description about the management node (Max 200 characters are allowed).
- Enter the Pod Admin's Email ID. Run time validation will check if the entered Email ID belong to the Pod Admin.
  - 1 Run time validation will check if the entered Email ID belong to the Pod Admin.
  - 2 If entered Email ID is not the Pod Admin's ID, then User is not registered as Pod Admin error is displayed.
  - 3 If entered Email ID is the Pod Admin's ID, then User-Name is auto-populated.
  - 4 Section to upload Management Node CA
    - Server certificate is located on management node at `/var/www/mercury/mercury-ca.crt`.
    - Validation to check the cert file size and extensions are handled.
    - Click on Upload and Update button.
    - If certificate file passes all the validation then a message would be visible "Uploaded Root CA Certificate).

- Click **Register** and management node health validation would take place.
  - If Management Node Validation fails due to invalid certificate, then Insight will delete the certificate from the uploaded path.
  - If Management Node Validation fails due to Password mismatch, then proper message for password mismatch would be visible but certificate won't be deleted hence you can fix the password then go ahead with the Registration.
  - If Rest API service is down on the Management Node then error message "Installer REST API Service is not available" message would be visible.

## Login to Insight as Pod Admin

To login to Insight as Pod Admin, follow these steps:

- 
- Step 1** Enter the registered Email ID.
- Step 2** Enter the valid password.
- Step 3** Click **Login as POD**.
- Note** After successful Sign in user will be redirected to the Dashboard.
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## The VIM Insight UI

The VIM Insight UI is divided into four parts:

### 1 Dashboard

Dashboard of the VIM Installer provides the user an intuitive view of monitoring deployment. Dashboard provides a 3D view of 8 stages, which are present in the Installer CLI. The Carrousel displays the real-time status of the install steps, and it rotates automatically once an install stage is completed and a new install stage is started or scheduled. Dashboard maintains the pod state even when the User logs out. It will show the most recent data available via the VIM REST API on the management node. Dashboard provides the following rights to the administrator:

- a Deployed Blueprint Details:** Shows information about the current Blueprint (Active/In-Progress). In case of an Inactive Blueprint, the table will be blank.
  - a Deployment Status:** This tells the status of the Blueprint. There are 3 stages of a Blueprint : Active, in-progress and Failed. In case of in-progress and Failed states, the stage name would be mentioned in Deployment Status which is a hyperlink. If you click on the stage name, the carrousel will directly jump to that particular stage.
  - b Deployment Started at:** This tells the time when the installation was started.
  - c Last Updated at:** This tells the last updated time of the installation.
  - d Click Here to check logs:** If you click **Here** you will be redirected to the logs page in a new tab for which you will have to enter the REST Username and Password located at `/opt/cisco/ui_config.json` on the node. By default REST Username is "admin".
- b POD Operation Details:** Displays the status regarding all the POD Activities done POST Installation like POD Management, Re-generate Secrets, etc. Following are the information shared in POD Operation Details table:
  - a Current Operation:** Name of the Operation Running.
  - b POD Operation Status:** Status of the Operation.
  - c Operation Started at:** Operation Start time.

- d Last Updated at: Operation last update time.
- c **Blueprint Deployment Progress bar for a given POD:** Shows the Blueprint success or failure state in percentage.
- d **Switch Between Management Nodes:** Will be covered later in this chapter.

**Figure 1: VIM Insight Dashboard**



## 2 Pre-install

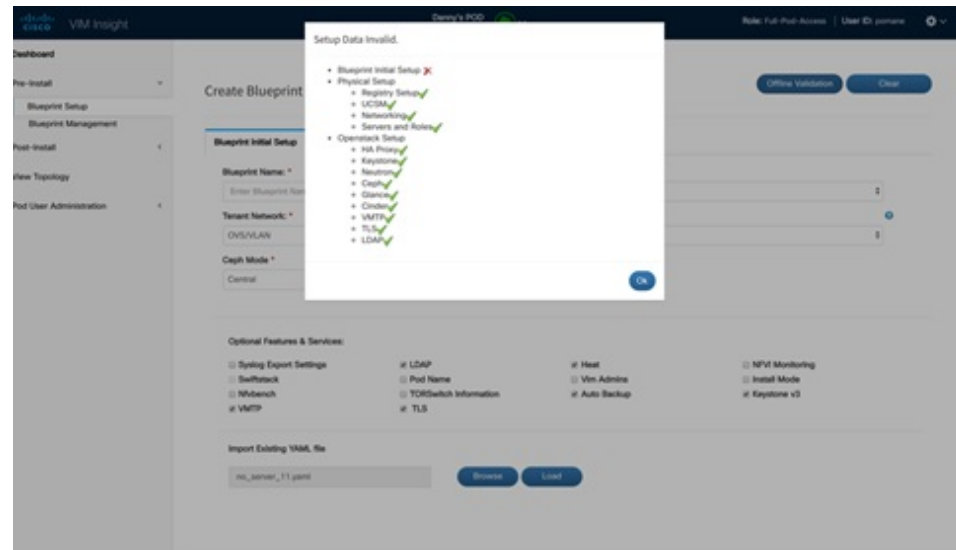
This section has two menus:

- a **Blueprint Setup:** Blueprint is the YAML (setupdata) present in the Management node. There are two ways to create a Blueprint:
  - a Form based through the UI.
  - b Upload an existing YAML.

In case of manual creation the user has to fill in details for Initial setup, physical setup and OpenStack, which covers core and optional features like VMTP, NFVI Monitoring, Auto configuration of ToR, Optional services like Heat, Keystonev3 and so on. In case of upload of an existing YAML, the user can just upload the file and click **Upload** to automatically populate all the corresponding fields in the UI. At any given point, one can initiate the offline validation of the entry, by clicking the **Offline Validate** button, on the upper right hand corner in the **Blueprint Setup** menu.

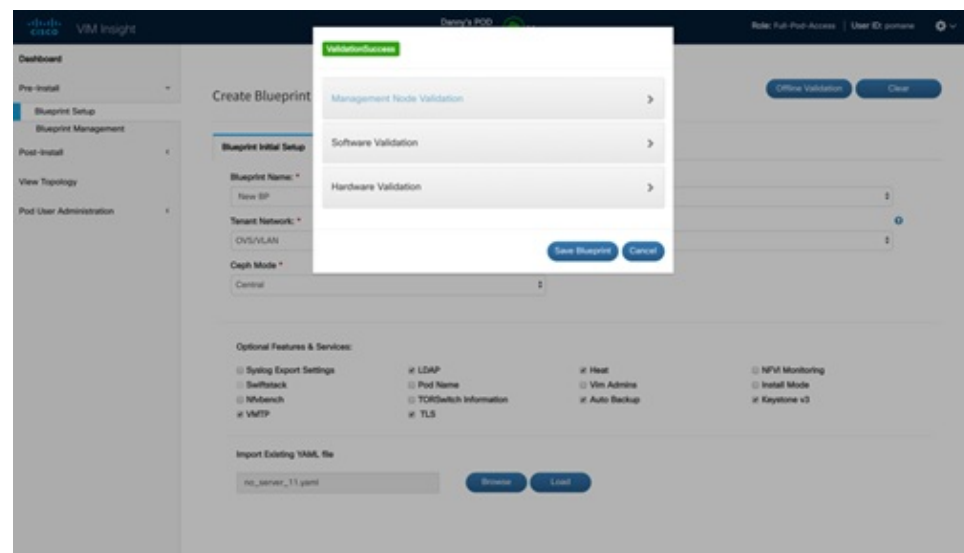
Offline Validation will only take place if all the fields marked in Blueprint are filled and there are no client side validations remaining. Even if they are the Offline Validation, pop up will show which field is missing.

**Figure 2: Blueprint Creation**



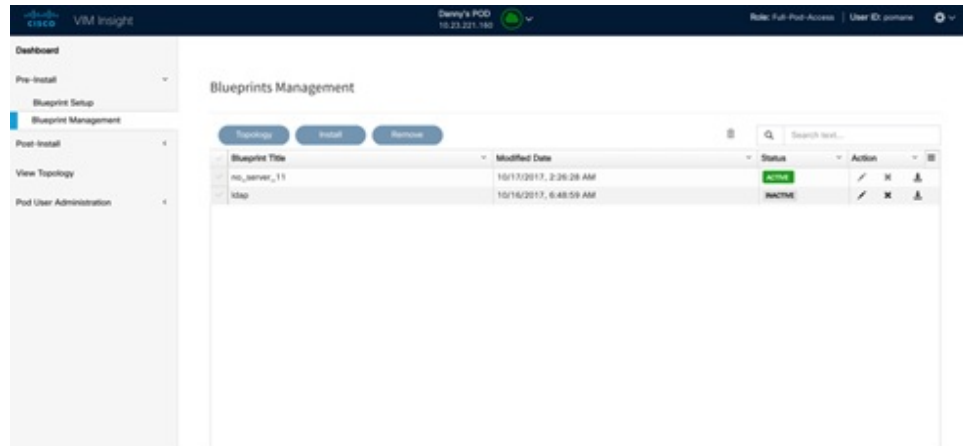
After filling all the details offline validation will take place, if successful, **Save Blueprint** option will be enabled, else user will not be allowed to save the Blueprint. Click **Save blueprint** to be redirected to Blueprint Management.

**Figure 3: Blueprint Successful**



- b Blueprint Management:** Blueprint Management gives CRUD access to users for Blueprints in the System. A user can use following features in Blueprint Management:

**Figure 4: Blueprint Management**



- a Delete Single or Multiple Blueprints which are in Inactive State.
- b Edit Blueprint which are in Inactive State.
- c Deploy Blueprint.
- d Uninstall or Abort Blueprint.
- e Preview and Download created Blueprint on local machine.
- f Search Blueprint from created Blueprints.

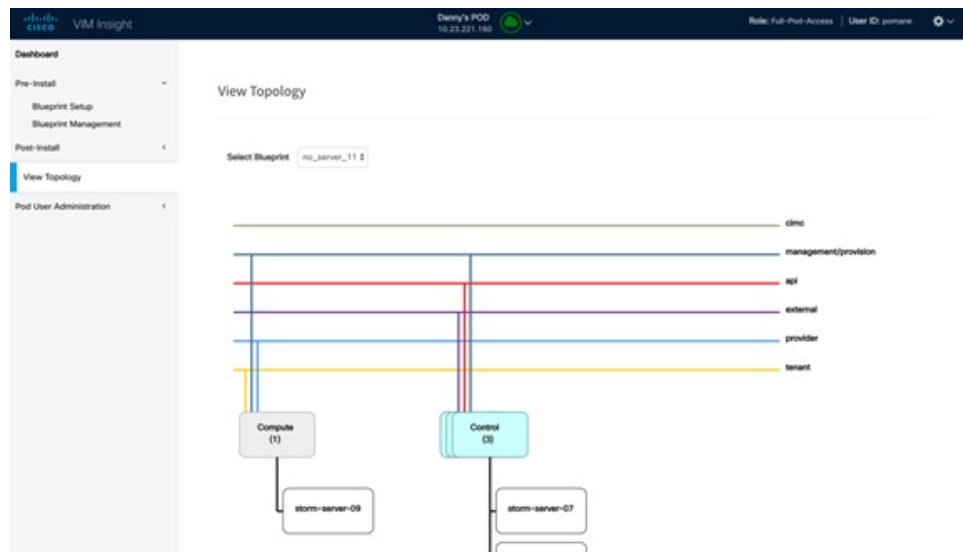
### 3 Post-install.

This section is active only when a Blueprint is in active state; that is if the install is successful, hence day-n operations are allowed.

### 4 Topology.

Topology is a logical representation of the Blueprint where it tells the user about the nodes connectivity with the respective networks and hardware information. Topology shows the active blueprints and user can select one among them.

**Figure 5: Topology**



## 5 Pod User Administration

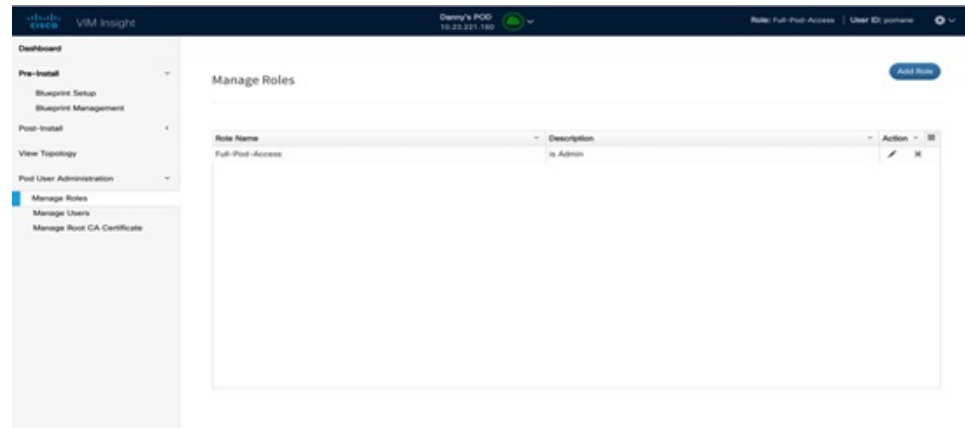
Pod User Administration menu is available only to admin of the Management Node. This admin can be default admin of the pod or users assigned with Pod Admin role by the default admin. It has two additional sub-panel options:

### a Manage Roles:

- a Add/Edit/Delete Roles.
- b Permissions to restrict the user access.
- c Roles provide the granular access to a specific user.

- d A role cannot be deleted directly if it is associated to an user.

**Figure 6: Manage roles**



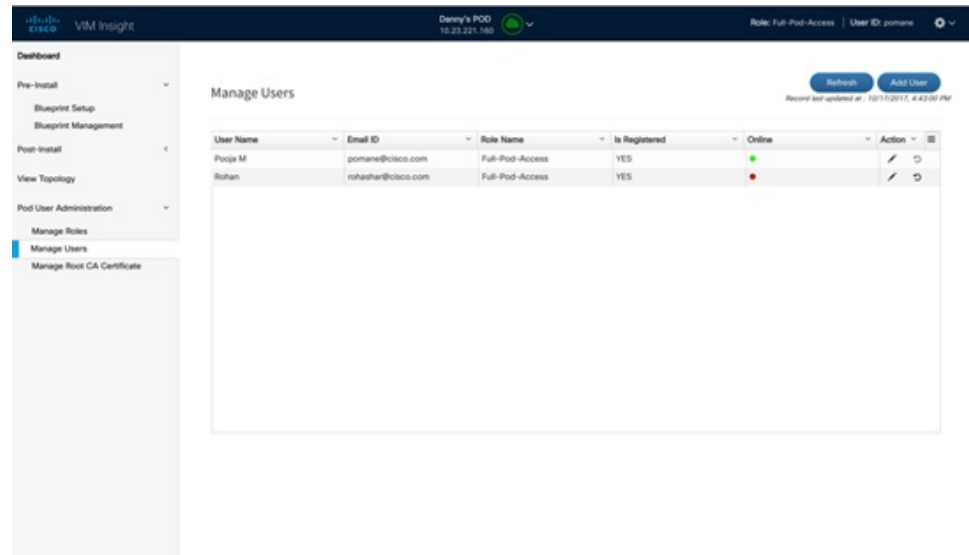
**b Manage Users:**

- a Add/Edit/Delete Users.
- b List User name and Email ID for the users registered in the system.
- c Roles associated to users.
- d The current status of the user (Online and Offline user with Green and Red dot respectively).
- e User registration status.



- f Refresh button to get latest information about the users status.

**Figure 7: Manage users**

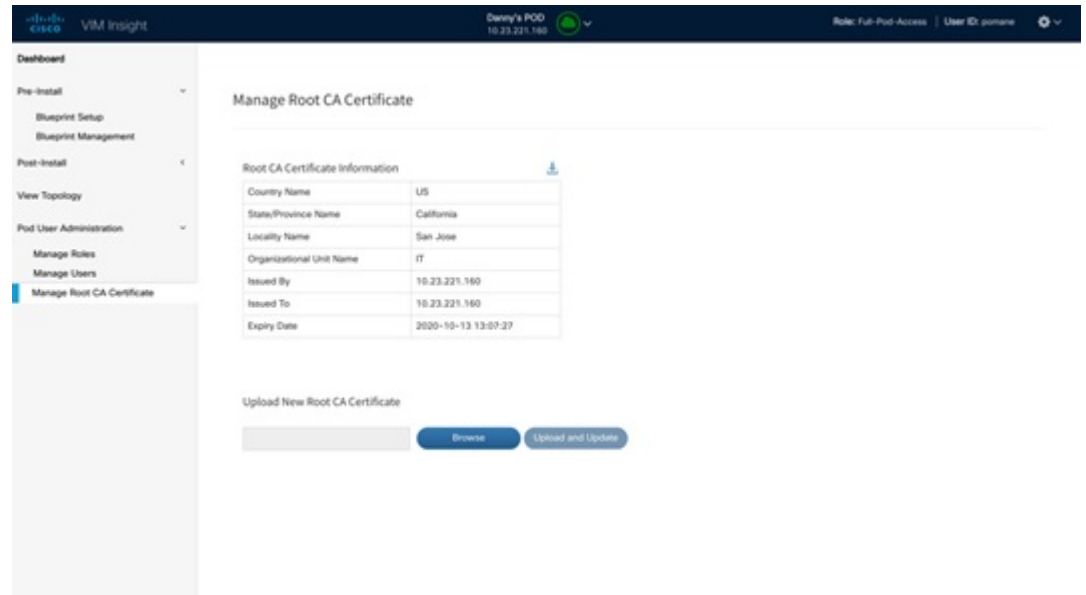


**c Manage Root CA Certificate:**

- a Edit existing Root CA Certificate of the Management Node ( Location: /var/www/mercury/mercury-ca.crt)
- b You can also download existing certificate from Insight.
- c If invalid Certificate is uploaded through Insight then previous working state will be recovered after clicking the **Upload** button.

- d If Certificate is valid Management Node HEALTH check will be executed.

**Figure 8: Manage Root CA Certificate**



VIM Insight also have some extra features in the header:

- 1 User ID and Role - Indicates the User ID and Role of the current user.
- 2 Management Node Context Switching - User can switch between two or more nodes. (Right in the middle for the header).
- 3 Management Node Name and IP Address: Indicates the name and IP address of the management node.
- 4 User Profile - User can change the Password or Logout or change log level between Info and Debug.

## Context Switching within Insight

One of the key features in VIM Insight, is that if you have permission for the node you can switch between two or more pods. You can be a Admin for one or more pods, and a normal user for some other pod, simultaneously. Ability to access multiple pods, provides the user to maintain context and yet scale from a pod management.

There are two ways that you can switch to another pod:

- 1 **Context Switching Icon:** Context Switching Icon is located at the middle of the UI header. Click **Management Node Context Switching** to access all available pods.
- 2 **Switch Between Management Nodes:** Switch Between Management Nodes is situated in the Dashboard. You can navigate to any pod by a single click. If the REST password provided during registration of the Management node does not match the current REST Password for that particular node, the cloud icon at the middle of the UI header will turn red instead of green. The Pod Admin/User can reach out to UI Admin and ask them to update the password for that node from Manage Nodes in Insight UI Admin Portal.

# Configuring OpenStack Installation

## Before You Begin

You need to create a Blueprint (B or C Series) to initiate OpenStack Installation through the VIM.

**Step 1** In the **Navigation** pane, choose **Pre-Install > Blueprint Setup**.

**Step 2** To create a **B Series Blueprint**:

- 1 On the **Blueprint Initial Setup** page of the Cisco VIM Insight , complete the following fields:

Name	Description
<b>Blueprint Name</b> field	Enter blueprint configuration name.
<b>Platform Type</b> drop-down list	Choose one of the following platform types: <ul style="list-style-type: none"> <li>• B-Series (By default) choose B series for this section.</li> <li>• C-Series</li> </ul>
<b>Tenant Network</b> drop-down list	Choose one of the following tenant network types: <ul style="list-style-type: none"> <li>• Linuxbridge/VXLAN</li> <li>• OVS/VLAN</li> </ul>
<b>Pod Type</b> drop-down list	Choose one of the following pod types: <ul style="list-style-type: none"> <li>• Fullon(By Default)</li> <li>• Micro</li> <li>• UMHC</li> </ul> <p><b>Note</b> UMHC pod type is only supported for OVS/VLAN tenant type.</p> <p><b>Note</b> Pod type micro is supported for OVS/VLAN, ACI/VLAN,VPP/VLAN.</p>
<b>Ceph Mode</b> drop-down list	Choose one of the following Ceph types: <ul style="list-style-type: none"> <li>• Dedicated</li> <li>• Central (By Default) - Not supported in Production</li> </ul>

Name	Description
<b>Optional Features and Services</b> Checkbox	Swiftstack, LDAP, Syslog Export Settings, Install Mode, TorSwitch Information, TLS, Nfvmon, Pod Name, VMTP, Nfvbench, Auto Backup, Heat, Keystone v3, Enable Esc Priv.  If any one is selected, the corresponding section is visible in various Blueprint sections.  By default all features are disabled except Auto Backup.
<b>Import Existing YAML file</b>	Click <b>Browse</b> button to import the existing yaml file.  If you have an existing B Series YAML file you can use this feature to upload the file.  Insight will automatically fill in the fields and if any mandatory field is missed then it will be highlight it in the respective section.

- 2 Click **Physical Setup** to navigate to the **Registry Setup configuration** page. Fill in the following details for Registry Setup:

Name	Description
<b>Registry User Name</b> text field	User-Name for Registry ( <b>Mandatory</b> ).
<b>Registry Password</b> text field	Password for Registry ( <b>Mandatory</b> ).
<b>Registry Email</b> text field	Email ID for Registry ( <b>Mandatory</b> ).

Once all mandatory fields are filled the **Validation Check Registry Page** will show a Green Tick.

- 3 Click **UCSM Common Tab** and complete the following fields:

Name	Description
<b>User name</b> disabled field	By default value is Admin.
<b>Password</b> text field	Enter Password for UCSM Common ( <b>Mandatory</b> ).
<b>UCSM IP</b> text field	Enter IP Address for UCSM Common(Mandatory).
<b>Resource Prefix</b> text field	Enter the resource prefix( <b>Mandatory</b> ).
<b>QOS Policy Type</b> drop-down	Choose one of the following types: <ul style="list-style-type: none"> <li>• NFVI (Default)</li> <li>• Media</li> </ul>

Name	Description
Max VF Count text field	Select the Max VF Count. <1-54> Maximum VF count 54, default is 20. If VF performance is enabled we recommend you to keep MAX_VF_COUNT to 20 else may fail on some VICs like 1240.
Enable VF Performance optional checkbox	Default is false. Set to true to apply adaptor policy at VF level.
Enable Prov FI PIN optional checkbox	Default is false.
MRAID-CARD optional checkbox	Enables JBOD mode to be set on disks. Applicable only if you have RAID controller configured on Storage C240 Rack servers.
Enable UCSM Plugin optional checkbox	Visible when Tenant Network type is OVS/VLAN
Enable QoS Policy optional checkbox	Visible only when UCSM Plugin is enabled. If UCSM Plugin is disabled then this option is set to False.
Enable QOS for Port Profile optional checkbox	Visible only when UCSM Plugin is enabled.
SRIOV Multi VLAN Trunk optional grid	Visible when UCSM Plugin is enabled. Enter the values for network and vlans ranges. Grid can handle all CRUD operations like Add, Delete, Edit and, Multiple Delete.

- 4 Click **Networking** to advance to the networking section of the Blueprint:

Name	Description
Domain Name field	Enter the domain name ( <b>Mandatory</b> ).
HTTP Proxy Server field	If your configuration uses an HTTP proxy server, enter the IP address of the server.
HTTPS Proxy Server field	If your configuration uses an HTTPS proxy server, enter the IP address of the server.
IP Tables on Management Pods	Specifies the list of IP Address with Mask.
NTP Server	Enter a maximum of four and minimum of one IPv4 and /or IPv6 addresses in the table.
Domain Name Server	Enter a maximum of three and minimum of one IPv4 and/or IPv6 addresses.

Name	Description
Network table	

Name	Description										
	<p>Network table is pre-populated with segments. To add Networks you can either clear all the table using <b>Delete All</b> or click <b>Edit</b> icon for each segment and fill in the details.</p> <p>You can add, edit, or delete network information in the table:</p> <ul style="list-style-type: none"> <li>• Click + to enter new entries (networks) to the table.</li> <li>• Specify the following fields in the <b>Edit Entry to Networks</b> dialog box.</li> </ul> <table border="1" data-bbox="927 695 1516 1843"> <thead> <tr> <th data-bbox="932 701 1219 749">Name</th> <th data-bbox="1219 701 1511 749">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="932 749 1219 919"> <b>VLAN field</b> </td> <td data-bbox="1219 749 1511 919">                     Enter the VLAN ID.                      For Segment - Provider, the VLAN ID value is always "none".                 </td> </tr> <tr> <td data-bbox="932 919 1219 1570"> <b>Segment drop-down list</b> </td> <td data-bbox="1219 919 1511 1570">                     You can select any one segment from the dropdown list.                     <ul style="list-style-type: none"> <li>• API</li> <li>• Management/Provision</li> <li>• Tenant</li> <li>• CIMC</li> <li>• Storage</li> <li>• External</li> <li>• Provider (optional)</li> </ul> <p><b>Note</b> Some segments do not need some of the values listed in the preceding points.</p> </td> </tr> <tr> <td data-bbox="932 1570 1219 1667"> <b>Subnet field</b> </td> <td data-bbox="1219 1570 1511 1667">                     Enter the IPv4 address for the subnet.                 </td> </tr> <tr> <td data-bbox="932 1667 1219 1843"> <b>IPv6 Subnet field</b> </td> <td data-bbox="1219 1667 1511 1843">                     Enter IPv6 address. This field will be available only for Management provision and API.                 </td> </tr> </tbody> </table>	Name	Description	<b>VLAN field</b>	Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always "none".	<b>Segment drop-down list</b>	You can select any one segment from the dropdown list. <ul style="list-style-type: none"> <li>• API</li> <li>• Management/Provision</li> <li>• Tenant</li> <li>• CIMC</li> <li>• Storage</li> <li>• External</li> <li>• Provider (optional)</li> </ul> <p><b>Note</b> Some segments do not need some of the values listed in the preceding points.</p>	<b>Subnet field</b>	Enter the IPv4 address for the subnet.	<b>IPv6 Subnet field</b>	Enter IPv6 address. This field will be available only for Management provision and API.
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Name	Description	
	<b>Name</b>	<b>Description</b>
	<b>Gateway field</b>	Enter the IPv4 address for the Gateway.
	<b>IPv6 Gateway field</b>	Enter IPv6 gateway. This field will only available only for Management provision and API network.
	<b>Pool field</b>	Enter the pool information in the required format, for example: 10.30.1.1 or 10.30.1.1 to 10.30.1.12
	<b>IPv6 Pool field</b>	Enter the pool information in the required format, for example: 10.1.1.5-10.1.1.10,10.2.1.5-10.2.1.10 This field is only available for the Mgmt/Provision.
Click <b>Save</b> .		

- 5 On the **Servers and Roles** page of the Cisco VIM Suite wizard, you will see a pre-populated table filled with Roles: Control, Compute and Block Storage (Only if CEPH Dedicated is selected in Blueprint Initial Setup).

Name	Description
Server User Name field	Enter the username of the server.
Disable Hyperthreading	Default value is false. You can set it as true or false.



Name	Description																
<b>Cobbler</b>	Enter the Cobbler details in the following fields:																
	<table border="1"> <thead> <tr> <th data-bbox="922 380 1219 422">Name</th> <th data-bbox="1219 380 1518 422">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="922 422 1219 695"><b>Cobbler Timeout</b> field</td> <td data-bbox="1219 422 1518 695">The default value is 45 min.  This is an optional parameter. Timeout is displayed in minutes, and its value ranges from 30 to 120.</td> </tr> <tr> <td data-bbox="922 695 1219 789"><b>Block Storage Kickstart</b> field</td> <td data-bbox="1219 695 1518 789">Kickstart file for Storage Node.</td> </tr> <tr> <td data-bbox="922 789 1219 1010"><b>Admin Password Hash</b> field</td> <td data-bbox="1219 789 1518 1010">Enter the Admin Password. Password should be Alphanumeric. Password should contain minimum 8 characters and maximum of 32 characters.</td> </tr> <tr> <td data-bbox="922 1010 1219 1142"><b>Cobbler Username</b> field</td> <td data-bbox="1219 1010 1518 1142">Enter the cobbler username to access the cobbler server.</td> </tr> <tr> <td data-bbox="922 1142 1219 1236"><b>Control Kickstart</b> field</td> <td data-bbox="1219 1142 1518 1236">Kickstart file for Control Node.</td> </tr> <tr> <td data-bbox="922 1236 1219 1331"><b>Compute Kickstart</b> field</td> <td data-bbox="1219 1236 1518 1331">Kickstart file for Compute Node.</td> </tr> <tr> <td data-bbox="922 1331 1219 1428"><b>Cobbler Admin Username</b> field</td> <td data-bbox="1219 1331 1518 1428">Enter the admin username of the Cobbler.</td> </tr> </tbody> </table>	Name	Description	<b>Cobbler Timeout</b> field	The default value is 45 min.  This is an optional parameter. Timeout is displayed in minutes, and its value ranges from 30 to 120.	<b>Block Storage Kickstart</b> field	Kickstart file for Storage Node.	<b>Admin Password Hash</b> field	Enter the Admin Password. Password should be Alphanumeric. Password should contain minimum 8 characters and maximum of 32 characters.	<b>Cobbler Username</b> field	Enter the cobbler username to access the cobbler server.	<b>Control Kickstart</b> field	Kickstart file for Control Node.	<b>Compute Kickstart</b> field	Kickstart file for Compute Node.	<b>Cobbler Admin Username</b> field	Enter the admin username of the Cobbler.
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<b>Cobbler Admin Username</b> field	Enter the admin username of the Cobbler.																

Name	Description		
<b>Add Entry to Servers and Roles</b>	Click <b>Edit</b> or <b>+</b> to add a new server and role to the table.		
	<table border="1"> <tr> <td data-bbox="885 384 1182 432"><b>Server Name</b></td> <td data-bbox="1187 384 1477 432">Enter a server name</td> </tr> </table>	<b>Server Name</b>	Enter a server name
	<b>Server Name</b>	Enter a server name	
	<table border="1"> <tr> <td data-bbox="885 447 1182 531"><b>Server Type</b> drop-down list</td> <td data-bbox="1187 447 1477 531">Choose Blade or Rack from the drop-down list.</td> </tr> </table>	<b>Server Type</b> drop-down list	Choose Blade or Rack from the drop-down list.
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	<table border="1"> <tr> <td data-bbox="885 543 1182 627"><b>Rack ID</b></td> <td data-bbox="1187 543 1477 627">The Rack ID for the server.</td> </tr> </table>	<b>Rack ID</b>	The Rack ID for the server.
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<table border="1"> <tr> <td data-bbox="885 963 1182 1140">Select the <b>Role</b> from the drop-down list.</td> <td data-bbox="1187 963 1477 1140">If Server type is Blade then select <b>Control and Compute</b>. If server is Rack then select <b>Block Storage</b>.</td> </tr> </table>	Select the <b>Role</b> from the drop-down list.	If Server type is Blade then select <b>Control and Compute</b> . If server is Rack then select <b>Block Storage</b> .	
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<table border="1"> <tr> <td data-bbox="885 1152 1182 1329"><b>Management IP</b></td> <td data-bbox="1187 1152 1477 1329">It is an optional field but if provided for one server then it is mandatory to provide details for other Servers as well.</td> </tr> </table>	<b>Management IP</b>	It is an optional field but if provided for one server then it is mandatory to provide details for other Servers as well.	
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<table border="1"> <tr> <td data-bbox="885 1341 1182 1425"><b>Management IPv6</b></td> <td data-bbox="1187 1341 1477 1425">Enter the Management IPv6 Address.</td> </tr> </table>	<b>Management IPv6</b>	Enter the Management IPv6 Address.	
<b>Management IPv6</b>	Enter the Management IPv6 Address.		
Click <b>Save</b> .			

- 6 Click **ToR Switch** checkbox in **Blueprint Initial Setup** to enable the **TOR SWITCH** configuration page. It is an **Optional** section in Blueprint Setup but once all the fields are filled it is a part of the Blueprint.

Name	Description
<b>Configure ToR</b> optional checkbox.	Enabling this checkbox, changes the configure ToR section from false to true.

Name	Description																							
<b>ToR Switch Information</b> mandatory table.	Click (+) to add information for ToR Switch. <table border="1" data-bbox="878 373 1516 1272"> <thead> <tr> <th data-bbox="878 373 1198 436">Name</th> <th data-bbox="1198 373 1516 436">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="878 436 1198 499"><b>Hostname</b></td> <td data-bbox="1198 436 1516 499">ToR switch hostname.</td> </tr> <tr> <td data-bbox="878 499 1198 562"><b>Username</b></td> <td data-bbox="1198 499 1516 562">ToR switch username.</td> </tr> <tr> <td data-bbox="878 562 1198 625"><b>Password</b></td> <td data-bbox="1198 562 1516 625">Tor switch password.</td> </tr> <tr> <td data-bbox="878 625 1198 688"><b>SSH IP</b></td> <td data-bbox="1198 625 1516 688">ToR switch SSH IP Address.</td> </tr> <tr> <td data-bbox="878 688 1198 751"><b>SSN Num</b></td> <td data-bbox="1198 688 1516 751">ToR switch ssn num.</td> </tr> <tr> <td data-bbox="878 751 1198 888"><b>VPC Peer Keepalive</b></td> <td data-bbox="1198 751 1516 888">Peer Management IP. You do not define if there is no peer.</td> </tr> <tr> <td data-bbox="878 888 1198 982"><b>VPC Domain</b></td> <td data-bbox="1198 888 1516 982">Do not define if peer is absent.</td> </tr> <tr> <td data-bbox="878 982 1198 1045"><b>VPC Peer Port Info</b></td> <td data-bbox="1198 982 1516 1045">Interface for vpc peer ports.</td> </tr> <tr> <td data-bbox="878 1045 1198 1140"><b>BR Management Port Info</b></td> <td data-bbox="1198 1045 1516 1140">Management interface of management node.</td> </tr> <tr> <td data-bbox="878 1140 1198 1272"><b>BR Management PO Info</b></td> <td data-bbox="1198 1140 1516 1272">Port channel number for management interface of management node.</td> </tr> </tbody> </table> ClickSave.		Name	Description	<b>Hostname</b>	ToR switch hostname.	<b>Username</b>	ToR switch username.	<b>Password</b>	Tor switch password.	<b>SSH IP</b>	ToR switch SSH IP Address.	<b>SSN Num</b>	ToR switch ssn num.	<b>VPC Peer Keepalive</b>	Peer Management IP. You do not define if there is no peer.	<b>VPC Domain</b>	Do not define if peer is absent.	<b>VPC Peer Port Info</b>	Interface for vpc peer ports.	<b>BR Management Port Info</b>	Management interface of management node.	<b>BR Management PO Info</b>	Port channel number for management interface of management node.
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<b>Hostname</b>	ToR switch hostname.																							
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<b>VPC Peer Port Info</b>	Interface for vpc peer ports.																							
<b>BR Management Port Info</b>	Management interface of management node.																							
<b>BR Management PO Info</b>	Port channel number for management interface of management node.																							
On clicking save button, <b>Add ToR Info Connected to Fabric</b> field will be visible.	<b>Port Channel</b> field.	Enter the Port Channel input.																						
	<b>Switch Name</b> field.	Enter the Port number.																						

- 7 Click **OpenStack Setup** tab to advance to the OpenStack Setup Configuration page.
- 8 On the **OpenStack Setup** page of the Cisco VIM Insight wizard, complete the following fields:

Name	Description										
<b>HA Proxy</b>	Fill in the following details: <table border="1" data-bbox="847 373 1479 823"> <tr> <td data-bbox="847 373 1162 470"><b>External VIP Address</b> field</td> <td data-bbox="1162 373 1479 470">Enter IP address of External VIP.</td> </tr> <tr> <td data-bbox="847 470 1162 567"><b>External VIP Address IPv6</b> field</td> <td data-bbox="1162 470 1479 567">Enter IPv6 address of External VIP.</td> </tr> <tr> <td data-bbox="847 567 1162 632"><b>Virtual Router ID</b> field</td> <td data-bbox="1162 567 1479 632">Enter the Router ID for HA.</td> </tr> <tr> <td data-bbox="847 632 1162 728"><b>Internal VIP Address IPv6</b> field</td> <td data-bbox="1162 632 1479 728">Enter IPv6 address of Internal IP.</td> </tr> <tr> <td data-bbox="847 728 1162 823"><b>Internal VIP Address</b> field</td> <td data-bbox="1162 728 1479 823">Enter IP address of Internal VIP.</td> </tr> </table>	<b>External VIP Address</b> field	Enter IP address of External VIP.	<b>External VIP Address IPv6</b> field	Enter IPv6 address of External VIP.	<b>Virtual Router ID</b> field	Enter the Router ID for HA.	<b>Internal VIP Address IPv6</b> field	Enter IPv6 address of Internal IP.	<b>Internal VIP Address</b> field	Enter IP address of Internal VIP.
<b>External VIP Address</b> field	Enter IP address of External VIP.										
<b>External VIP Address IPv6</b> field	Enter IPv6 address of External VIP.										
<b>Virtual Router ID</b> field	Enter the Router ID for HA.										
<b>Internal VIP Address IPv6</b> field	Enter IPv6 address of Internal IP.										
<b>Internal VIP Address</b> field	Enter IP address of Internal VIP.										
<b>Keystone</b>	Pre-populated field values. This option would always be true. <table border="1" data-bbox="847 947 1479 1052"> <tr> <td data-bbox="847 947 1162 999"><b>Admin Username</b> field</td> <td data-bbox="1162 947 1479 999">admin</td> </tr> <tr> <td data-bbox="847 999 1162 1052"><b>Admin Tenant Name</b> field</td> <td data-bbox="1162 999 1479 1052">admin</td> </tr> </table>	<b>Admin Username</b> field	admin	<b>Admin Tenant Name</b> field	admin						
<b>Admin Username</b> field	admin										
<b>Admin Tenant Name</b> field	admin										

Name	Description																												
<p><b>LDAP (Only if Keystonev3 is enabled)</b></p> <p><b>Note</b> This option is only available with Keystone v3</p>	<p>This is available only when Keystone v3 and LDAP both are enabled under Optional Features and Services in Blueprint Initial Setup.</p> <table border="1" data-bbox="886 436 1516 1623"> <tbody> <tr> <td data-bbox="886 436 1198 531"><b>Domain Name</b> field</td> <td data-bbox="1198 436 1516 531">Enter name for Domain name.</td> </tr> <tr> <td data-bbox="886 531 1198 596"><b>Object Class for Users</b> field</td> <td data-bbox="1198 531 1516 596">Enter a string as input.</td> </tr> <tr> <td data-bbox="886 596 1198 693"><b>Object Class for Groups</b>field</td> <td data-bbox="1198 596 1516 693">Enter a string.</td> </tr> <tr> <td data-bbox="886 693 1198 789"><b>Domain Name Tree for Users</b> field</td> <td data-bbox="1198 693 1516 789">Enter a string.</td> </tr> <tr> <td data-bbox="886 789 1198 886"><b>Domain Name Tree for Groups</b> field</td> <td data-bbox="1198 789 1516 886">Enter a string.</td> </tr> <tr> <td data-bbox="886 886 1198 982"><b>Suffix for Domain Name</b> field</td> <td data-bbox="1198 886 1516 982">Enter a string.</td> </tr> <tr> <td data-bbox="886 982 1198 1079"><b>URL</b> field</td> <td data-bbox="1198 982 1516 1079">Enter a URL with ending port number.</td> </tr> <tr> <td data-bbox="886 1079 1198 1176"><b>Domain Name of bind user</b> field</td> <td data-bbox="1198 1079 1516 1176">Enter a string.</td> </tr> <tr> <td data-bbox="886 1176 1198 1272"><b>Password</b> field</td> <td data-bbox="1198 1176 1516 1272">Enter Password as string format.</td> </tr> <tr> <td data-bbox="886 1272 1198 1337"><b>User Filter</b> field</td> <td data-bbox="1198 1272 1516 1337">Enter filter name as string.</td> </tr> <tr> <td data-bbox="886 1337 1198 1402"><b>User ID Attribute</b> field</td> <td data-bbox="1198 1337 1516 1402">Enter a string.</td> </tr> <tr> <td data-bbox="886 1402 1198 1467"><b>User Name Attribute</b> field</td> <td data-bbox="1198 1402 1516 1467">Enter a string.</td> </tr> <tr> <td data-bbox="886 1467 1198 1533"><b>User Mail Attribute</b> field</td> <td data-bbox="1198 1467 1516 1533">Enter a string.</td> </tr> <tr> <td data-bbox="886 1533 1198 1623"><b>Group Name Attribute</b> field</td> <td data-bbox="1198 1533 1516 1623">Enter a string.</td> </tr> </tbody> </table>	<b>Domain Name</b> field	Enter name for Domain name.	<b>Object Class for Users</b> field	Enter a string as input.	<b>Object Class for Groups</b> field	Enter a string.	<b>Domain Name Tree for Users</b> field	Enter a string.	<b>Domain Name Tree for Groups</b> field	Enter a string.	<b>Suffix for Domain Name</b> field	Enter a string.	<b>URL</b> field	Enter a URL with ending port number.	<b>Domain Name of bind user</b> field	Enter a string.	<b>Password</b> field	Enter Password as string format.	<b>User Filter</b> field	Enter filter name as string.	<b>User ID Attribute</b> field	Enter a string.	<b>User Name Attribute</b> field	Enter a string.	<b>User Mail Attribute</b> field	Enter a string.	<b>Group Name Attribute</b> field	Enter a string.
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Name	Description														
Neutron	<p>Neutron fields would change on the basis of <b>Tenant Network Type</b> Selection from <b>Blueprint Initial Setup</b>. Following are the options available for Neutron for OVS/VLAN:</p> <table border="1" data-bbox="849 436 1479 1612"> <tbody> <tr> <td data-bbox="849 436 1162 596"><b>Tenant Network Type</b> field</td> <td data-bbox="1162 436 1479 596">Auto Filled based on the Tenant Network Type selected in the Blueprint Initial Setup page.</td> </tr> <tr> <td data-bbox="849 596 1162 756"><b>Mechanism Drivers</b> field</td> <td data-bbox="1162 596 1479 756">Auto Filled based on the Tenant Network Type selected in Blueprint Initial Setup page.</td> </tr> <tr> <td data-bbox="849 756 1162 1199"><b>NFV Hosts</b> field</td> <td data-bbox="1162 756 1479 1199">           Auto filled with the Compute you added in Server and Roles.             If you select All in this section NFV_HOSTS: <b>ALL</b> will be added to the Blueprint or you can select one particular compute. For Eg:             NFV_HOSTS:            compute-server-1,            compute-server-2.         </td> </tr> <tr> <td data-bbox="849 1199 1162 1293"><b>Tenant VLAN Ranges</b> field</td> <td data-bbox="1162 1199 1479 1293">List of ranges separated by comma form start:end.</td> </tr> <tr> <td data-bbox="849 1293 1162 1388"><b>Provider VLAN Ranges</b> field</td> <td data-bbox="1162 1293 1479 1388">List of ranges separated by comma form start:end.</td> </tr> <tr> <td data-bbox="849 1388 1162 1518"><b>VM High Page Size (available for NFV_HOSTS option)</b> field</td> <td data-bbox="1162 1388 1479 1518">2M or 1G</td> </tr> <tr> <td data-bbox="849 1518 1162 1612"><b>Enable Jumbo Frames</b> field</td> <td data-bbox="1162 1518 1479 1612">Enable the checkbox</td> </tr> </tbody> </table> <p>For Tenant Network Type Linux Bridge everything remains the same but <b>Tenant VLAN Ranges</b> will be removed.</p>	<b>Tenant Network Type</b> field	Auto Filled based on the Tenant Network Type selected in the Blueprint Initial Setup page.	<b>Mechanism Drivers</b> field	Auto Filled based on the Tenant Network Type selected in Blueprint Initial Setup page.	<b>NFV Hosts</b> field	Auto filled with the Compute you added in Server and Roles.  If you select All in this section NFV_HOSTS: <b>ALL</b> will be added to the Blueprint or you can select one particular compute. For Eg:  NFV_HOSTS: compute-server-1, compute-server-2.	<b>Tenant VLAN Ranges</b> field	List of ranges separated by comma form start:end.	<b>Provider VLAN Ranges</b> field	List of ranges separated by comma form start:end.	<b>VM High Page Size (available for NFV_HOSTS option)</b> field	2M or 1G	<b>Enable Jumbo Frames</b> field	Enable the checkbox
<b>Tenant Network Type</b> field	Auto Filled based on the Tenant Network Type selected in the Blueprint Initial Setup page.														
<b>Mechanism Drivers</b> field	Auto Filled based on the Tenant Network Type selected in Blueprint Initial Setup page.														
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<b>Tenant VLAN Ranges</b> field	List of ranges separated by comma form start:end.														
<b>Provider VLAN Ranges</b> field	List of ranges separated by comma form start:end.														
<b>VM High Page Size (available for NFV_HOSTS option)</b> field	2M or 1G														
<b>Enable Jumbo Frames</b> field	Enable the checkbox														

Name	Description
CEPH	Ceph has two pre-populated fields <ul style="list-style-type: none"><li>• <b>CEPH Mode</b> : By default Dedicated.</li><li>• <b>NOVA Boot from</b>: Drop Down selection. You can choose Ceph or local.</li></ul>
GLANCE	By default populated for <b>CEPH Dedicated</b> with Store Backend value as <b>CEPH</b> .
CINDER	By default Populated for <b>CEPH Dedicated</b> with Volume Driver value as <b>CEPH</b> .

Name	Description
<b>VMTP</b> VMTP optional section will only be visible once VMTP is selected from Blueprint Initial Setup.	



Name	Description																										
	<p>Check one of the check boxes to specify a VMTP network:</p> <ul style="list-style-type: none"> <li>• Provider Network</li> <li>• External Network</li> </ul> <p>For the <b>Provider Network</b> complete the following:</p> <table border="1" data-bbox="886 537 1513 1178"> <tbody> <tr> <td data-bbox="886 537 1203 632"><b>Network Name</b> field</td> <td data-bbox="1203 537 1513 632">Enter the name for the external network.</td> </tr> <tr> <td data-bbox="886 632 1203 726"><b>Subnet</b> field</td> <td data-bbox="1203 632 1513 726">Enter the Subnet for Provider Network.</td> </tr> <tr> <td data-bbox="886 726 1203 821"><b>Network IP Start</b> field</td> <td data-bbox="1203 726 1513 821">Enter the starting floating IPv4 address.</td> </tr> <tr> <td data-bbox="886 821 1203 915"><b>Network IP End</b> field</td> <td data-bbox="1203 821 1513 915">Enter the ending floating IPv4 address.</td> </tr> <tr> <td data-bbox="886 915 1203 1010"><b>Network Gateway</b>field</td> <td data-bbox="1203 915 1513 1010">Enter the IPv4 address for the Gateway.</td> </tr> <tr> <td data-bbox="886 1010 1203 1104"><b>DNS Server</b> field</td> <td data-bbox="1203 1010 1513 1104">Enter the DNS server IPv4 address.</td> </tr> <tr> <td data-bbox="886 1104 1203 1178"><b>Segmentation ID</b> field</td> <td data-bbox="1203 1104 1513 1178">Enter the segmentation ID.</td> </tr> </tbody> </table> <p>For <b>External Network</b> fill in the following details:</p> <table border="1" data-bbox="886 1283 1513 1856"> <tbody> <tr> <td data-bbox="886 1283 1203 1377"><b>Network Name</b> field</td> <td data-bbox="1203 1283 1513 1377">Enter the name for the external network.</td> </tr> <tr> <td data-bbox="886 1377 1203 1472"><b>Subnet</b> field</td> <td data-bbox="1203 1377 1513 1472">Enter the Subnet for External Network.</td> </tr> <tr> <td data-bbox="886 1472 1203 1566"><b>Network IP Start</b> field</td> <td data-bbox="1203 1472 1513 1566">Enter the starting floating IPv4 address.</td> </tr> <tr> <td data-bbox="886 1566 1203 1661"><b>Network IP End</b> field</td> <td data-bbox="1203 1566 1513 1661">Enter the ending floating IPv4 address.</td> </tr> <tr> <td data-bbox="886 1661 1203 1755"><b>Network Gateway</b> field</td> <td data-bbox="1203 1661 1513 1755">Enter the IPv4 address for the Gateway.</td> </tr> <tr> <td data-bbox="886 1755 1203 1856"><b>DNS Server</b> field</td> <td data-bbox="1203 1755 1513 1856">Enter the DNS server IPv4 address.</td> </tr> </tbody> </table>	<b>Network Name</b> field	Enter the name for the external network.	<b>Subnet</b> field	Enter the Subnet for Provider Network.	<b>Network IP Start</b> field	Enter the starting floating IPv4 address.	<b>Network IP End</b> field	Enter the ending floating IPv4 address.	<b>Network Gateway</b> field	Enter the IPv4 address for the Gateway.	<b>DNS Server</b> field	Enter the DNS server IPv4 address.	<b>Segmentation ID</b> field	Enter the segmentation ID.	<b>Network Name</b> field	Enter the name for the external network.	<b>Subnet</b> field	Enter the Subnet for External Network.	<b>Network IP Start</b> field	Enter the starting floating IPv4 address.	<b>Network IP End</b> field	Enter the ending floating IPv4 address.	<b>Network Gateway</b> field	Enter the IPv4 address for the Gateway.	<b>DNS Server</b> field	Enter the DNS server IPv4 address.
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<b>Network Gateway</b> field	Enter the IPv4 address for the Gateway.																										
<b>DNS Server</b> field	Enter the DNS server IPv4 address.																										

Name	Description												
<p><b>TLS</b> This optional section will only be visible once TLS is selected from Blueprint Initial Setup Page.</p>	<p><b>TLS</b> has two options:</p> <ul style="list-style-type: none"> <li>• <b>External LB VIP FQDN</b> - -Text field.</li> <li>• <b>External LB VIP TLS</b> True/False. By default this option is false.</li> </ul>												
<p>Under the OpenStack setup tab, <b>Vim_admins</b> tab will be visible only when Vim_admins is selected from the <b>Optional Features &amp; Services</b> under the Blueprint Initial setup tab</p>	<p>Following are the field descriptions for VIM Admins:</p> <ul style="list-style-type: none"> <li>• <b>User Name</b> - Text field.</li> <li>• <b>Password</b> -Password field. Admin hash password should always start with \$6.</li> </ul>												
<p><b>SwiftStack</b> optional section will be visible once SwiftStack is selected from <b>Blueprint Initial Setup</b> Page. SwiftStack is only supported with KeyStonev2 . If you select Keystonev3, swiftstack will not be available for configuration.</p>	<p>Following are the options that needs to be filled for SwiftStack:</p> <table border="1" data-bbox="849 911 1479 1503"> <tbody> <tr> <td data-bbox="849 911 1162 1024"><b>Cluster End Point</b> field</td> <td data-bbox="1162 911 1479 1024">IP address of PAC (proxy-account-container) endpoint.</td> </tr> <tr> <td data-bbox="849 1024 1162 1108"><b>Admin User</b> field</td> <td data-bbox="1162 1024 1479 1108">Admin user for swift to authenticate in keystone.</td> </tr> <tr> <td data-bbox="849 1108 1162 1255"><b>Admin Tenant</b> field</td> <td data-bbox="1162 1108 1479 1255">The service tenant corresponding to the Account-Container used by Swiftstack.</td> </tr> <tr> <td data-bbox="849 1255 1162 1402"><b>Reseller Prefix</b> field</td> <td data-bbox="1162 1255 1479 1402">Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack E.g KEY_</td> </tr> <tr> <td data-bbox="849 1402 1162 1455"><b>Admin Password</b> field</td> <td data-bbox="1162 1402 1479 1455">swiftstack_admin_password</td> </tr> <tr> <td data-bbox="849 1455 1162 1503"><b>Protocol</b></td> <td data-bbox="1162 1455 1479 1503">http or https</td> </tr> </tbody> </table>	<b>Cluster End Point</b> field	IP address of PAC (proxy-account-container) endpoint.	<b>Admin User</b> field	Admin user for swift to authenticate in keystone.	<b>Admin Tenant</b> field	The service tenant corresponding to the Account-Container used by Swiftstack.	<b>Reseller Prefix</b> field	Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack E.g KEY_	<b>Admin Password</b> field	swiftstack_admin_password	<b>Protocol</b>	http or https
<b>Cluster End Point</b> field	IP address of PAC (proxy-account-container) endpoint.												
<b>Admin User</b> field	Admin user for swift to authenticate in keystone.												
<b>Admin Tenant</b> field	The service tenant corresponding to the Account-Container used by Swiftstack.												
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<b>Admin Password</b> field	swiftstack_admin_password												
<b>Protocol</b>	http or https												

- 9 If **Syslog Export** or **NFVBENCH** is selected in **Blueprint Initial Setup** Page, the **Services Setup** page will be enabled for the user to view. Following are the options under **Services Setup** Tab:

Name	Description												
Syslog Export	<p>Following are the options for Syslog Settings:</p> <table border="1" data-bbox="846 373 1516 793"> <tbody> <tr> <td data-bbox="846 373 1182 436"><b>Remote Host</b></td> <td data-bbox="1182 373 1516 436">Enter Syslog IP address.</td> </tr> <tr> <td data-bbox="846 436 1182 499"><b>Protocol</b></td> <td data-bbox="1182 436 1516 499">Only UDP is supported.</td> </tr> <tr> <td data-bbox="846 499 1182 562"><b>Facility</b></td> <td data-bbox="1182 499 1516 562">Defaults to local5.</td> </tr> <tr> <td data-bbox="846 562 1182 625"><b>Severity</b></td> <td data-bbox="1182 562 1516 625">Defaults to debug.</td> </tr> <tr> <td data-bbox="846 625 1182 688"><b>Clients</b></td> <td data-bbox="1182 625 1516 688">Defaults to ELK.</td> </tr> <tr> <td data-bbox="846 688 1182 793"><b>Port</b></td> <td data-bbox="1182 688 1516 793">Defaults to 514 but can be modified by the User.</td> </tr> </tbody> </table>	<b>Remote Host</b>	Enter Syslog IP address.	<b>Protocol</b>	Only UDP is supported.	<b>Facility</b>	Defaults to local5.	<b>Severity</b>	Defaults to debug.	<b>Clients</b>	Defaults to ELK.	<b>Port</b>	Defaults to 514 but can be modified by the User.
<b>Remote Host</b>	Enter Syslog IP address.												
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<b>Severity</b>	Defaults to debug.												
<b>Clients</b>	Defaults to ELK.												
<b>Port</b>	Defaults to 514 but can be modified by the User.												
NFVBENCH	<p>NFVBENCH <b>enable checkbox</b> which by default is <b>false</b>.</p> <p>Add ToR information connected to switch:</p> <ul style="list-style-type: none"> <li>• Select a TOR Switch and enter the Switch name.</li> <li>• Enter the port number. For example:eth1/5. VTEP VLANS (mandatory and needed only for VXLAN): Enter 2 different VLANs for VLAN1 and VLAN2</li> <li>• NIC Ports: INT1 and INT2 optional input. Enter the 2 port numbers of the 4-port 10G Intel NIC at the management node used for NFVBench.</li> </ul>												
ENABLE_ESC_PRIV	Enable the checkbox to set it as True. By default it is <b>False</b> .												

### Step 3 To create a C Series Blueprint:

- 1 On the **Blueprint Initial Setup** page of the Cisco VIM Insight, complete the following fields:

Name	Description
<b>Blueprint Name</b> field.	Enter the name for the blueprint configuration.
<b>Platform Type</b> drop-down list	<p>Choose one of the following platform types:</p> <ul style="list-style-type: none"> <li>• B-Series (By default)</li> <li>• C-Series ( Select C Series)</li> </ul>

Name	Description
<b>Tenant Network</b> drop-down list	Choose one of the following tenant network types: <ul style="list-style-type: none"> <li>• Linux Bridge/VXLAN</li> <li>• OVS/VLAN</li> <li>• VTS/VLAN</li> <li>• VPP/VLAN</li> <li>• ACI/VLAN</li> </ul> <p><b>Note</b> when VTS/VLAN or ACI/VLAN is selected then respective tabs are available on Blueprint setup.</p>
<b>Pod Type</b> drop-down list	Choose one of the following pod type : <ul style="list-style-type: none"> <li>• Fullon(By Default)</li> <li>• Micro</li> <li>• UMHC</li> </ul> <p><b>Note</b> UMHC pod type is only supported for OVS/VLAN tenant type.</p> <p><b>Note</b> Pod type micro is supported for OVS/VLAN, ACI/VLAN,VPP/VLAN.</p>
<b>Ceph Mode</b> drop-down list	Choose one of the following Ceph types: <ul style="list-style-type: none"> <li>• Dedicated (By Default)</li> <li>• Central. Central is not supported in Production</li> </ul>
<b>Optional and Services Features</b> checkbox	Swiftstack, LDAP, Syslog Export Settings, Install Mode, TorSwitch Information, TLS, NFVMON, Pod Name, VMTP, NFVBench, Autbackup, Heat, Keystone v3, Enable Esc Priv. <p>If any one is selected, the corresponding section is visible in various Blueprint sections.</p> <p>By default all features are disabled except Auto Backup.</p>
<b>Import Existing YAML file</b>	If you have an existing C Series YAML file you can use this feature to upload the file. <p>Insight will automatically fill in the fields and any missed mandatory field will be highlighted in the respective section.</p>

- 2 Click **Physical Setup** to advance to the **Registry Setup** configuration page. Fill in the following details for Registry Setup:

Name	Description
<b>Registry User Name</b> text field	User-Name for Registry <b>(Mandatory)</b> .
<b>Registry Password</b> text field	Password for Registry <b>(Mandatory)</b> .
<b>Registry Email</b> text field	Email ID for Registry <b>(Mandatory)</b> .

Once all the mandatory fields are filled the **Validation Check Registry Page** will be changed to a Green Tick.

- 3 Click **CIMC Common Tab** and complete the following fields:

Name	Description
<b>User Name</b> disabled field	By default value is Admin.
<b>Password</b> text field	Enter Password for UCSM Common <b>(Mandatory)</b> .

- 4 Click Networking to advance to the networking section of the Blueprint.

Name	Description
<b>Domain Name</b> field	Enter the domain name. <b>(Mandatory)</b>
<b>HTTP Proxy Server</b> field	If your configuration uses an HTTP proxy server, enter the IP address of the server.
<b>HTTPS Proxy Server</b> field	If your configuration uses an HTTPS proxy server, enter the IP address of the server.
<b>IP Tables on Management Pods</b>	Specifies the list of IP Address with Mask.
<b>NTP Servers</b> field	Enter a maximum of four and minimum of one IPv4 and/or IPv6 addresses in the table.
<b>Domain Name Servers</b> field	Enter a maximum of three and minimum of one IPv4 and/or IPV6 addresses.

Name	Description
Networks table	

Name	Description						
	<p>Network table is pre-populated with Segments. To add Networks you can either clear all the table with <b>Delete all</b> or click <b>edit</b> icon for each segment and fill in the details.</p> <p>You can add, edit, or delete network information in the table.</p> <ul style="list-style-type: none"> <li>• Click <b>Add (+)</b> to add new entries (networks) to the table.</li> <li>• Specify the following fields in the Edit Entry to Networks dialog:</li> </ul> <table border="1" data-bbox="922 726 1520 1843"> <thead> <tr> <th data-bbox="927 732 1219 781">Name</th> <th data-bbox="1219 732 1515 781">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="927 781 1219 953">VLAN field</td> <td data-bbox="1219 781 1515 953">Enter the <b>VLAN ID</b>. For Segment - Provider, the VLAN ID value is 'none'.</td> </tr> <tr> <td data-bbox="927 953 1219 1837">Segment drop-down list</td> <td data-bbox="1219 953 1515 1837"> <p>When you add/edit new segment then following segments types are available in the form of dropdown list and you can select only one.</p> <ul style="list-style-type: none"> <li>• API</li> <li>• Management/provision</li> <li>• Tenant</li> <li>• Storage</li> <li>• External</li> <li>• Provider</li> <li>• ACIINFRA</li> </ul> <p><b>Note</b> <b>Aciinfra</b> segment is available only when ACI/VLAN tenant type is selected) Depending upon the segment some of the entries below are not needed. Please</p> </td> </tr> </tbody> </table>	Name	Description	VLAN field	Enter the <b>VLAN ID</b> . For Segment - Provider, the VLAN ID value is 'none'.	Segment drop-down list	<p>When you add/edit new segment then following segments types are available in the form of dropdown list and you can select only one.</p> <ul style="list-style-type: none"> <li>• API</li> <li>• Management/provision</li> <li>• Tenant</li> <li>• Storage</li> <li>• External</li> <li>• Provider</li> <li>• ACIINFRA</li> </ul> <p><b>Note</b> <b>Aciinfra</b> segment is available only when ACI/VLAN tenant type is selected) Depending upon the segment some of the entries below are not needed. Please</p>
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Name	Description	
		refer to the example file in openstack-configs dir for details.
	<b>Subnet field</b>	Enter the IPv4 address for the subnet.
	<b>IPv6 Subnet field</b>	Enter IPv6 Address. This field will be available only for Management provision and API
	<b>Gateway field</b>	Enter the IPv4 address for the Gateway.
	<b>Gateway IPv6 field</b>	Enter the IPv6 address for the gateway. This will support for API and management provision.
	<b>Pool field</b>	Enter the pool information in the required format, for example: 10.1.15-10.1.1.10,102.15-102.1.10  This field is available only for the Mgmt/Provision, Storage, and Tenant segments.
	<b>IPv6 Pool field</b>	Enter the pool information in the required format. For example: 10.1.15-10.1.1.10,102.15-102.1.10
Click <b>Save</b> .		

- 5 On the **Servers and Roles** page of the Cisco VIM Suite wizard, a pre-populated table filled with Roles : Control, Compute and Block Storage (Only if CEPH Dedicated is selected in Blueprint Initial Setup is available).

Name	Description
<b>Server User Name field</b>	Enter the username of the Server.



Name	Description																
<b>Disable Hyperthreading</b>	Default value is false. You can set it as true or false.																
<b>Cobbler</b>	<p data-bbox="889 394 1511 426">Enter the Cobbler details in the following fields:</p> <table border="1" data-bbox="889 436 1511 1398"> <thead> <tr> <th data-bbox="889 443 1203 491">Name</th> <th data-bbox="1203 443 1511 491">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="889 491 1203 695"><b>Cobbler Timeout</b> field</td> <td data-bbox="1203 491 1511 695">The default value is 45 min. This is an optional parameter. Timeout is displayed in minutes, and its value ranges from 30 to 120.</td> </tr> <tr> <td data-bbox="889 695 1203 789"><b>Block Storage Kickstart</b> field</td> <td data-bbox="1203 695 1511 789">Kickstart file for Storage Node.</td> </tr> <tr> <td data-bbox="889 789 1203 1014"><b>Admin Password Hash</b> field</td> <td data-bbox="1203 789 1511 1014">Enter the Admin Password. Password should be Alphanumeric. Password should contain minimum 8 characters and maximum of 32 characters.</td> </tr> <tr> <td data-bbox="889 1014 1203 1108"><b>Cobbler Username</b> field</td> <td data-bbox="1203 1014 1511 1108">Enter the cobbler username to access the cobbler server.</td> </tr> <tr> <td data-bbox="889 1108 1203 1203"><b>Control Kickstart</b> field</td> <td data-bbox="1203 1108 1511 1203">Kickstart file for Control Node.</td> </tr> <tr> <td data-bbox="889 1203 1203 1297"><b>Compute Kickstart</b> field</td> <td data-bbox="1203 1203 1511 1297">Kickstart file for Compute Node.</td> </tr> <tr> <td data-bbox="889 1297 1203 1398"><b>Cobbler Admin Username</b> field</td> <td data-bbox="1203 1297 1511 1398">Enter the admin username of the Cobbler.</td> </tr> </tbody> </table>	Name	Description	<b>Cobbler Timeout</b> field	The default value is 45 min. This is an optional parameter. Timeout is displayed in minutes, and its value ranges from 30 to 120.	<b>Block Storage Kickstart</b> field	Kickstart file for Storage Node.	<b>Admin Password Hash</b> field	Enter the Admin Password. Password should be Alphanumeric. Password should contain minimum 8 characters and maximum of 32 characters.	<b>Cobbler Username</b> field	Enter the cobbler username to access the cobbler server.	<b>Control Kickstart</b> field	Kickstart file for Control Node.	<b>Compute Kickstart</b> field	Kickstart file for Compute Node.	<b>Cobbler Admin Username</b> field	Enter the admin username of the Cobbler.
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Name	Description																			
<p><b>Add Entry to Servers and Roles</b></p> <p><b>Note</b> when Pod type micro is selected then all the three servers will be associated with control, compute and block storage role. For Example: Roles</p> <ul style="list-style-type: none"> <li>• Block Storage <ul style="list-style-type: none"> <li>◦ -Server 1</li> <li>◦ -Server 2</li> <li>◦ -Server 3</li> </ul> </li> <li>• Control <ul style="list-style-type: none"> <li>◦ -Server 1</li> <li>◦ -Server 2</li> <li>◦ -Server 3</li> </ul> </li> <li>• Compute <ul style="list-style-type: none"> <li>◦ -Server 1</li> <li>◦ -Server 2</li> <li>◦ -Server 3</li> </ul> </li> </ul> <p><b>Note</b> When Pod type UMHC is selected then auto ToR configuration is not supported and the ToR info at server and roles level is not allowed to be entered.</p>	<p>Click <b>Edit</b> or + to add a new server and role to the table.</p> <table border="1" data-bbox="850 373 1481 1241"> <tr> <td data-bbox="850 373 1166 436"><b>Server Name</b></td> <td data-bbox="1170 373 1481 436">Entry a friendly name.</td> </tr> <tr> <td data-bbox="850 443 1166 506"><b>Rack ID</b> field</td> <td data-bbox="1170 443 1481 506">The rack ID for the server.</td> </tr> <tr> <td data-bbox="850 512 1166 575"><b>VIC Slot</b> field</td> <td data-bbox="1170 512 1481 575">Enter a VIC Slot.</td> </tr> <tr> <td data-bbox="850 581 1166 644"><b>CIMC IP</b> field</td> <td data-bbox="1170 581 1481 644">Enter a IP address.</td> </tr> <tr> <td data-bbox="850 651 1166 714"><b>CIMC Username</b> field</td> <td data-bbox="1170 651 1481 714">Enter a Username.</td> </tr> <tr> <td data-bbox="850 720 1166 783"><b>CIMC Password</b> field</td> <td data-bbox="1170 720 1481 783">Enter a Password for CIMC.</td> </tr> <tr> <td data-bbox="850 789 1166 888">Select the <b>Role</b> from the drop down list</td> <td data-bbox="1170 789 1481 888">Choose Control or Compute or Block Storage from the drop-down list.</td> </tr> <tr> <td data-bbox="850 894 1166 1052"><b>Management IP</b></td> <td data-bbox="1170 894 1481 1052">It is an optional field but if provided for one Server then it is mandatory to provide it for other Servers as well.</td> </tr> <tr> <td data-bbox="850 1058 1166 1241"><b>Management IPv6</b></td> <td data-bbox="1170 1058 1481 1241">Routable and valid IPv6 address. It is an optional field but if provided for one server then it is mandatory for all other servers as well.</td> </tr> </table>		<b>Server Name</b>	Entry a friendly name.	<b>Rack ID</b> field	The rack ID for the server.	<b>VIC Slot</b> field	Enter a VIC Slot.	<b>CIMC IP</b> field	Enter a IP address.	<b>CIMC Username</b> field	Enter a Username.	<b>CIMC Password</b> field	Enter a Password for CIMC.	Select the <b>Role</b> from the drop down list	Choose Control or Compute or Block Storage from the drop-down list.	<b>Management IP</b>	It is an optional field but if provided for one Server then it is mandatory to provide it for other Servers as well.	<b>Management IPv6</b>	Routable and valid IPv6 address. It is an optional field but if provided for one server then it is mandatory for all other servers as well.
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Click <b>Save or Add</b> .	On clicking <b>Save or Add</b> all information related to Servers and Roles gets saved.																			
If <b>Configure ToR</b> checkbox is <b>True</b> with at-least one switch detail, these fields will be displayed for each server and this is similar to DP Tor: <b>Port Channel and Switch Name (Mandatory if Configure ToR is true)</b>	<ul style="list-style-type: none"> <li>• <b>Port Channel</b> field</li> <li>• <b>Switch Name</b> field</li> <li>• <b>Switch Port Info</b> field</li> </ul>	<ul style="list-style-type: none"> <li>• Enter the port channel input.</li> <li>• Enter the switch name.</li> <li>• Enter the switch port information.</li> </ul>																		

Name	Description	
DP ToR (Only for Control and Compute) : Mandatory if Intel NIC and Configure TOR is True.	<ul style="list-style-type: none"> <li>• <b>Port Channel</b> field</li> <li>• <b>Switch Name</b> field</li> <li>• <b>Switch Port Info</b> field</li> </ul>	<ul style="list-style-type: none"> <li>• Enter the port channel input.</li> <li>• Enter the switch name.</li> <li>• Enter the switch port information.</li> </ul>
<b>SRIOV TOR INFO</b> (Only for Compute Nodes). It is mandatory in server and roles if Intel NIC and Configure TOR is True. <b>Switch Name (Mandatory if Configure ToR is true)</b> . This field appears only when Intel NIC support is true, as Auto TOR config is not supported in VIC_NIC combo	<ul style="list-style-type: none"> <li>• <b>Switch Name</b> field</li> <li>• <b>Switch Port Info</b> field</li> </ul>	<ul style="list-style-type: none"> <li>• Enter the switch name.</li> <li>• Enter the switch port information.</li> </ul>
<b>Intel SRIOV VFS</b> (valid for Intel NIC testbeds) and can be integer.	For SRIOV support for Intel NIC. By Default, SRIOV support is disabled. To enable, define a value in the range # * 1-32 when INTEL_NIC_SUPPORT is set True (X710 Max VFs = 32) # * 1-63 when CISCO_VIC_INTEL_SRIOV is set True (X520 Max VFs = 63)	
INTEL_SRIOV_PHYS_PORTS (valid for Intel NIC test beds) and can be of value 2 or 4 (default is 2)	In some cases the # of Physical SRIOV port needed is 4; to meet that requirement, define the following: # this is optional, if nothing is defined code will assume it to be 2; the only 2 integer values this parameter # takes is 2 or 4 and is true when INTEL_NIC_SUPPORT is True and INTEL_SRIOV_VFS is valid	
Click <b>Save or Add</b> .	If all mandatory fields are filled click <b>Save or Add</b> to add information on Servers and Roles.	
Disable Hyperthreading	Default value is false. You can set it as true or false.	
Click <b>Save</b>		

**Note** Maximum two ToR info needs to be configured for each connection type on each node (control, compute and block storage node).

**Note** If pod type UMHC is selected then CISCO\_VIC\_INTEL\_SRIOV is enabled to be TRUE.

**Note** For Tenant type ACI/VLAN, port channel for each ToR port will not be available in servers and roles, as APIC will automatically assign port-channel numbers.

- 6 Click **ToR Switch** checkbox in **Blueprint Initial Setup** to enable the **TOR SWITCH** configuration page. It is an **Optional** section in Blueprint Setup but once all the fields are filled in then it will become a part of the Blueprint.

Name	Description																										
<p><b>Configure ToR</b> optional checkbox.</p> <p><b>Note</b> If UMHC is selected as podtype, configure TOR is not allowed.</p>	<p>Enabling this checkbox, changes the configure ToR section from false to true.</p> <p><b>Note</b> Configure tor is true then ToR switch info maps in servers</p>																										
<p><b>ToR Switch Information</b> mandatory table if you want to enter ToR information.</p>	<p>Click (+) to add information for ToR Switch.</p> <table border="1" data-bbox="797 520 1479 1644"> <thead> <tr> <th data-bbox="797 520 1138 583">Name</th> <th data-bbox="1138 520 1479 583">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="797 583 1138 646"><b>Name</b></td> <td data-bbox="1138 583 1479 646">ToR switch name.</td> </tr> <tr> <td data-bbox="797 646 1138 709"><b>Username</b></td> <td data-bbox="1138 646 1479 709">ToR switch username.</td> </tr> <tr> <td data-bbox="797 709 1138 772"><b>Password</b></td> <td data-bbox="1138 709 1479 772">ToR switch password.</td> </tr> <tr> <td data-bbox="797 772 1138 835"><b>SSH IP</b></td> <td data-bbox="1138 772 1479 835">ToR switch SSH IP.</td> </tr> <tr> <td data-bbox="797 835 1138 898"><b>SSN Num</b></td> <td data-bbox="1138 835 1479 898">ToR switch ssn num.</td> </tr> <tr> <td data-bbox="797 898 1138 1035"><b>VPC Peer Keepalive</b></td> <td data-bbox="1138 898 1479 1035">Peer Management IP. You cannot define if there is no peer.</td> </tr> <tr> <td data-bbox="797 1035 1138 1129"><b>VPC Domain</b></td> <td data-bbox="1138 1035 1479 1129">Cannot define if there is no peer.</td> </tr> <tr> <td data-bbox="797 1129 1138 1192"><b>VPC Peer Port Info</b></td> <td data-bbox="1138 1129 1479 1192">Interface for vpc peer ports.</td> </tr> <tr> <td data-bbox="797 1192 1138 1287"><b>VPC Peer VLAN Info</b></td> <td data-bbox="1138 1192 1479 1287">VLAN ids for vpc peer ports (optional).</td> </tr> <tr> <td data-bbox="797 1287 1138 1381"><b>BR Management Port Info</b></td> <td data-bbox="1138 1287 1479 1381">Management interface of build node.</td> </tr> <tr> <td data-bbox="797 1381 1138 1518"><b>BR Management PO Info</b></td> <td data-bbox="1138 1381 1479 1518">Port channel number for management interface of build node.</td> </tr> <tr> <td data-bbox="797 1518 1138 1644"><b>BR Management VLAN info</b></td> <td data-bbox="1138 1518 1479 1644">VLAN id for management interface of build node (access).</td> </tr> </tbody> </table>	Name	Description	<b>Name</b>	ToR switch name.	<b>Username</b>	ToR switch username.	<b>Password</b>	ToR switch password.	<b>SSH IP</b>	ToR switch SSH IP.	<b>SSN Num</b>	ToR switch ssn num.	<b>VPC Peer Keepalive</b>	Peer Management IP. You cannot define if there is no peer.	<b>VPC Domain</b>	Cannot define if there is no peer.	<b>VPC Peer Port Info</b>	Interface for vpc peer ports.	<b>VPC Peer VLAN Info</b>	VLAN ids for vpc peer ports (optional).	<b>BR Management Port Info</b>	Management interface of build node.	<b>BR Management PO Info</b>	Port channel number for management interface of build node.	<b>BR Management VLAN info</b>	VLAN id for management interface of build node (access).
Name	Description																										
<b>Name</b>	ToR switch name.																										
<b>Username</b>	ToR switch username.																										
<b>Password</b>	ToR switch password.																										
<b>SSH IP</b>	ToR switch SSH IP.																										
<b>SSN Num</b>	ToR switch ssn num.																										
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Click <b>Save</b> .																											

**Note** When tenant type ACI/VLAN is selected, the TOR switch information table differs and is mandatory.

Name	Description																										
<p><b>Configure ToR</b> optional checkbox.</p> <p><b>Note</b> If UMHC is selected as podtype, configure TOR is not allowed.</p>	<p>Enabling this checkbox, changes the configure ToR section from false to true.</p> <p><b>Note</b> Configure tor is true then ToR switch info maps in servers</p>																										
<p><b>ToR Switch Information</b> mandatory table if you want to enter ToR information.</p>	<p>Click (+) to add information for ToR Switch.</p> <table border="1" data-bbox="834 520 1511 1640"> <thead> <tr> <th data-bbox="834 520 1175 583">Name</th> <th data-bbox="1175 520 1511 583">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="834 583 1175 646"><b>Name</b></td> <td data-bbox="1175 583 1511 646">ToR switch name.</td> </tr> <tr> <td data-bbox="834 646 1175 709"><b>Username</b></td> <td data-bbox="1175 646 1511 709">ToR switch username.</td> </tr> <tr> <td data-bbox="834 709 1175 772"><b>Password</b></td> <td data-bbox="1175 709 1511 772">ToR switch password.</td> </tr> <tr> <td data-bbox="834 772 1175 835"><b>SSH IP</b></td> <td data-bbox="1175 772 1511 835">ToR switch SSH IP.</td> </tr> <tr> <td data-bbox="834 835 1175 898"><b>SSN Num</b></td> <td data-bbox="1175 835 1511 898">ToR switch ssn num.</td> </tr> <tr> <td data-bbox="834 898 1175 1035"><b>VPC Peer Keepalive</b></td> <td data-bbox="1175 898 1511 1035">Peer Management IP. You cannot define if there is no peer.</td> </tr> <tr> <td data-bbox="834 1035 1175 1129"><b>VPC Domain</b></td> <td data-bbox="1175 1035 1511 1129">Cannot define if there is no peer.</td> </tr> <tr> <td data-bbox="834 1129 1175 1192"><b>VPC Peer Port Info</b></td> <td data-bbox="1175 1129 1511 1192">Interface for vpc peer ports.</td> </tr> <tr> <td data-bbox="834 1192 1175 1287"><b>VPC Peer VLAN Info</b></td> <td data-bbox="1175 1192 1511 1287">VLAN ids for vpc peer ports (optional).</td> </tr> <tr> <td data-bbox="834 1287 1175 1381"><b>BR Management Port Info</b></td> <td data-bbox="1175 1287 1511 1381">Management interface of build node.</td> </tr> <tr> <td data-bbox="834 1381 1175 1518"><b>BR Management PO Info</b></td> <td data-bbox="1175 1381 1511 1518">Port channel number for management interface of build node.</td> </tr> <tr> <td data-bbox="834 1518 1175 1640"><b>BR Management VLAN info</b></td> <td data-bbox="1175 1518 1511 1640">VLAN id for management interface of build node (access).</td> </tr> </tbody> </table>	Name	Description	<b>Name</b>	ToR switch name.	<b>Username</b>	ToR switch username.	<b>Password</b>	ToR switch password.	<b>SSH IP</b>	ToR switch SSH IP.	<b>SSN Num</b>	ToR switch ssn num.	<b>VPC Peer Keepalive</b>	Peer Management IP. You cannot define if there is no peer.	<b>VPC Domain</b>	Cannot define if there is no peer.	<b>VPC Peer Port Info</b>	Interface for vpc peer ports.	<b>VPC Peer VLAN Info</b>	VLAN ids for vpc peer ports (optional).	<b>BR Management Port Info</b>	Management interface of build node.	<b>BR Management PO Info</b>	Port channel number for management interface of build node.	<b>BR Management VLAN info</b>	VLAN id for management interface of build node (access).
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Click <b>Save</b> .																											

**Note** When the Tenant type ACI/VLAN is selected, the ToR switch information table differs and is mandatory.

Name	Description										
<b>Configure ToR</b>	Is not checked, as by default ACI will configure the ToRs <table border="1" data-bbox="886 373 1482 825"> <tbody> <tr> <td data-bbox="886 373 1182 436"><b>Host Name</b></td> <td data-bbox="1187 373 1482 436">ToR switch name.</td> </tr> <tr> <td data-bbox="886 443 1182 533"><b>VPC Peer keep alive</b></td> <td data-bbox="1187 443 1482 533">Enter Peer must be exist pair.</td> </tr> <tr> <td data-bbox="886 539 1182 602"><b>VPC Domain</b></td> <td data-bbox="1187 539 1482 602">Enter an integer.</td> </tr> <tr> <td data-bbox="886 609 1182 726"><b>BR management port info</b></td> <td data-bbox="1187 609 1482 726">Enter BR management port info eg. Eth1/19 ,atleast one pair to be exist.</td> </tr> <tr> <td data-bbox="886 732 1182 825"><b>Enter Node ID</b></td> <td data-bbox="1187 732 1482 825">Entered integer must be unique.</td> </tr> </tbody> </table>	<b>Host Name</b>	ToR switch name.	<b>VPC Peer keep alive</b>	Enter Peer must be exist pair.	<b>VPC Domain</b>	Enter an integer.	<b>BR management port info</b>	Enter BR management port info eg. Eth1/19 ,atleast one pair to be exist.	<b>Enter Node ID</b>	Entered integer must be unique.
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<b>Enter Node ID</b>	Entered integer must be unique.										

**Note** If TOR\_TYPE is selected as NCS-5500, the TOR switch information table differs and is mandatory.

Name	Description
<b>Configure ToR</b> optional checkbox <b>Note</b> If NSC-5500 is selected as TOR_TYPE, configure TOR is set as mandatory.	Enabling this checkbox, changes the configure ToR section from false to true. <b>Note</b> Configure TOR is true then ToR switchinfo maps in servers.

Name	Description																										
If you want to enter Fretta details fill in the <b>NCS-5500 Information</b> table.	Click (+) to add information for Fretta Switch.																										
	<table border="1"> <thead> <tr> <th data-bbox="920 375 1219 422">Name</th> <th data-bbox="1219 375 1516 422">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="920 422 1219 520"><b>Name</b></td> <td data-bbox="1219 422 1516 520">Enter the NCS-5500 hostname.</td> </tr> <tr> <td data-bbox="920 520 1219 619"><b>User Name</b></td> <td data-bbox="1219 520 1516 619">Enter the NCS-5500 username.</td> </tr> <tr> <td data-bbox="920 619 1219 697"><b>Password</b></td> <td data-bbox="1219 619 1516 697">Enter the NCS-5500 password.</td> </tr> <tr> <td data-bbox="920 697 1219 795"><b>SSH IP</b></td> <td data-bbox="1219 697 1516 795">Enter the NCS-5500 ssh IP Address.</td> </tr> <tr> <td data-bbox="920 795 1219 856"><b>VPC Peer Link</b></td> <td data-bbox="1219 795 1516 856">Peer management IP.</td> </tr> <tr> <td data-bbox="920 856 1219 984"><b>BR Management PO Info</b></td> <td data-bbox="1219 856 1516 984">Port channel number for management interface of build node.</td> </tr> <tr> <td data-bbox="920 984 1219 1113"><b>BR Management VLAN info</b></td> <td data-bbox="1219 984 1516 1113">VLAN id for management interface of build node (access).</td> </tr> <tr> <td data-bbox="920 1113 1219 1211"><b>VPC Peer Port Info</b></td> <td data-bbox="1219 1113 1516 1211">Interface for vpc peer ports.</td> </tr> <tr> <td data-bbox="920 1211 1219 1310"><b>VPC Peer Port Address</b></td> <td data-bbox="1219 1211 1516 1310">Address for ISIS exchange.</td> </tr> <tr> <td data-bbox="920 1310 1219 1388"><b>ISIS Loopback Interface address</b></td> <td data-bbox="1219 1310 1516 1388">ISIS loopback IP Address.</td> </tr> <tr> <td data-bbox="920 1388 1219 1449"><b>ISIS net entity title</b></td> <td data-bbox="1219 1388 1516 1449">Enter a String.</td> </tr> <tr> <td data-bbox="920 1449 1219 1547"><b>ISIS prefix SID</b></td> <td data-bbox="1219 1449 1516 1547">Integer between 16000 to 1048575.</td> </tr> </tbody> </table>	Name	Description	<b>Name</b>	Enter the NCS-5500 hostname.	<b>User Name</b>	Enter the NCS-5500 username.	<b>Password</b>	Enter the NCS-5500 password.	<b>SSH IP</b>	Enter the NCS-5500 ssh IP Address.	<b>VPC Peer Link</b>	Peer management IP.	<b>BR Management PO Info</b>	Port channel number for management interface of build node.	<b>BR Management VLAN info</b>	VLAN id for management interface of build node (access).	<b>VPC Peer Port Info</b>	Interface for vpc peer ports.	<b>VPC Peer Port Address</b>	Address for ISIS exchange.	<b>ISIS Loopback Interface address</b>	ISIS loopback IP Address.	<b>ISIS net entity title</b>	Enter a String.	<b>ISIS prefix SID</b>	Integer between 16000 to 1048575.
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When TOR-TYPE selected as NCS-5500 and 2 NCS-5500 are configured it is mandatory to configure MULTI\_SEGMENT\_ROUTING\_INFO

Name	Description
<b>BGP AS Number</b> field	Integer between 1 to 65535.

Name	Description
ISIS Area Tagfield	A valid string.
Loopback Interface namefield	Loopback Interface name.
API bundle IDfield	Integer between 1 to 65535.
API bridge domain field	String (Optional, only needed when br_api of mgmt node is also going through NCS-5500; this item and api_bundle_id are mutually exclusive).
EXT bridge domain field	A valid string (user pre-provisions physical, bundle interface, sub-interface and external BD for external uplink and provides external BD info setup_data).

- 7 Click **OpenStack Setup** Tab to advance to the **OpenStack Setup** Configuration page.
- 8 On the **OpenStack Setup** Configuration page of the Cisco VIM Insight wizard, complete the following fields:

Name	Description	
<b>HA Proxy</b>	Fill in the following details:	
	<b>External VIP Address</b> field	Enter IP address of External VIP.
	<b>External VIP Address IPv6</b> field	Enter IPv6 address of External VIP.
	<b>Virtual Router ID</b> field	Enter the Router ID for HA.
	<b>Internal VIP Address IPv6</b> field	Enter IPv6 address of Internal IP.
	<b>Internal VIP Address</b> field	Enter IP address of Internal VIP.
<b>Keystone</b>	Mandatory fields are pre-populated.	
	<b>Admin User Name</b>	admin.
	<b>Admin Tenant Name</b>	admin.



Name	Description																												
LDAP	<p data-bbox="841 325 1516 390">LDAP enable checkbox which by default is <b>false</b>, if LDAP is enabled on keystone.</p> <table border="1" data-bbox="841 405 1516 1465"> <tbody> <tr> <td data-bbox="847 413 1182 468">Domain Name field</td> <td data-bbox="1182 413 1510 468">Enter name for Domain name.</td> </tr> <tr> <td data-bbox="847 468 1182 531">Object Class for Users field</td> <td data-bbox="1182 468 1510 531">Enter a string as input.</td> </tr> <tr> <td data-bbox="847 531 1182 594">Object Class for Groupsfield</td> <td data-bbox="1182 531 1510 594">Enter a string.</td> </tr> <tr> <td data-bbox="847 594 1182 695">Domain Name Tree for Users field</td> <td data-bbox="1182 594 1510 695">Enter a string.</td> </tr> <tr> <td data-bbox="847 695 1182 791">Domain Name Tree for Groups field</td> <td data-bbox="1182 695 1510 791">Enter a string.</td> </tr> <tr> <td data-bbox="847 791 1182 854">Suffix for Domain Name field</td> <td data-bbox="1182 791 1510 854">Enter a string.</td> </tr> <tr> <td data-bbox="847 854 1182 951">URL field</td> <td data-bbox="1182 854 1510 951">Enter a URL with ending port number.</td> </tr> <tr> <td data-bbox="847 951 1182 1047">Domain Name of Bind User field</td> <td data-bbox="1182 951 1510 1047">Enter a string.</td> </tr> <tr> <td data-bbox="847 1047 1182 1144">Password field</td> <td data-bbox="1182 1047 1510 1144">Enter Password as string format.</td> </tr> <tr> <td data-bbox="847 1144 1182 1207">User Filter field</td> <td data-bbox="1182 1144 1510 1207">Enter filter name as string.</td> </tr> <tr> <td data-bbox="847 1207 1182 1270">User ID Attribute field</td> <td data-bbox="1182 1207 1510 1270">Enter a string.</td> </tr> <tr> <td data-bbox="847 1270 1182 1333">User Name Attribute field</td> <td data-bbox="1182 1270 1510 1333">Enter a string.</td> </tr> <tr> <td data-bbox="847 1333 1182 1396">User Mail Attribute field</td> <td data-bbox="1182 1333 1510 1396">Enter a string.</td> </tr> <tr> <td data-bbox="847 1396 1182 1459">Group Name Attribute field</td> <td data-bbox="1182 1396 1510 1459">Enter a string.</td> </tr> </tbody> </table>	Domain Name field	Enter name for Domain name.	Object Class for Users field	Enter a string as input.	Object Class for Groupsfield	Enter a string.	Domain Name Tree for Users field	Enter a string.	Domain Name Tree for Groups field	Enter a string.	Suffix for Domain Name field	Enter a string.	URL field	Enter a URL with ending port number.	Domain Name of Bind User field	Enter a string.	Password field	Enter Password as string format.	User Filter field	Enter filter name as string.	User ID Attribute field	Enter a string.	User Name Attribute field	Enter a string.	User Mail Attribute field	Enter a string.	Group Name Attribute field	Enter a string.
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Name	Description														
<b>Neutron</b>	<p>Neutron fields would change on the basis of <b>Tenant Network Type</b> Selection from <b>Blueprint Initial Setup</b>. Following are the options available for Neutron for OVS/VLAN:</p> <table border="1" data-bbox="805 436 1479 1486"> <tr> <td data-bbox="805 443 1138 596"><b>Tenant Network Type</b> field</td> <td data-bbox="1141 443 1479 596">Auto Filled based on the Tenant Network Type selected in the Blueprint Initial Setup page.</td> </tr> <tr> <td data-bbox="805 600 1138 722"><b>Mechanism Drivers</b> field</td> <td data-bbox="1141 600 1479 722">Auto Filled based on the Tenant Network Type selected in Blueprint Initial Setup page.</td> </tr> <tr> <td data-bbox="805 726 1138 1100"><b>NFV Hosts</b> field</td> <td data-bbox="1141 726 1479 1100">Auto filled with the Compute you added in Server and Roles. If you select All in this section NFV_HOSTS: <b>ALL</b> will be added to the Blueprint or you can select one particular compute. For Eg: NFV_HOSTS: compute-server-1, compute-server-2.</td> </tr> <tr> <td data-bbox="805 1104 1138 1192"><b>Tenant VLAN Ranges</b> field</td> <td data-bbox="1141 1104 1479 1192">List of ranges separated by comma form start:end.</td> </tr> <tr> <td data-bbox="805 1197 1138 1285"><b>Provider VLAN Ranges</b> field</td> <td data-bbox="1141 1197 1479 1285">List of ranges separated by comma form start:end.</td> </tr> <tr> <td data-bbox="805 1289 1138 1411"><b>VM High Page Size (available for NFV_HOSTS option)</b> field</td> <td data-bbox="1141 1289 1479 1411">2M or 1G</td> </tr> <tr> <td data-bbox="805 1415 1138 1482"><b>Enable Jumbo Frames</b> field</td> <td data-bbox="1141 1415 1479 1482">Enable the checkbox</td> </tr> </table> <p>For Tenant Network Type Linux Bridge everything remains the same but <b>Tenant VLAN Ranges</b> will be removed.</p>	<b>Tenant Network Type</b> field	Auto Filled based on the Tenant Network Type selected in the Blueprint Initial Setup page.	<b>Mechanism Drivers</b> field	Auto Filled based on the Tenant Network Type selected in Blueprint Initial Setup page.	<b>NFV Hosts</b> field	Auto filled with the Compute you added in Server and Roles. If you select All in this section NFV_HOSTS: <b>ALL</b> will be added to the Blueprint or you can select one particular compute. For Eg: NFV_HOSTS: compute-server-1, compute-server-2.	<b>Tenant VLAN Ranges</b> field	List of ranges separated by comma form start:end.	<b>Provider VLAN Ranges</b> field	List of ranges separated by comma form start:end.	<b>VM High Page Size (available for NFV_HOSTS option)</b> field	2M or 1G	<b>Enable Jumbo Frames</b> field	Enable the checkbox
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<b>Enable Jumbo Frames</b> field	Enable the checkbox														
<b>CEPH</b>	<p>Ceph has two pre-populated fields:</p> <ul style="list-style-type: none"> <li>• <b>CEPH Mode</b> : By default <b>Dedicated</b>.</li> <li>• <b>NOVA Boot</b>: From drop down selection you can choose <b>Ceph or local</b>.</li> </ul>														

Name	Description
GLANCE	By default Populated for <b>CEPH Dedicated</b> with <b>Store Backend</b> value as <b>CEPH</b> .
CINDER	By default Populated for <b>CEPH Dedicated</b> with <b>Volume Driver</b> value as <b>CEPH</b> .

Name	Description
<b>VMTP</b> optional section, this will be visible only if VMTP is selected from Blueprint Initial Setup. For VTS tenant type Provider network is only supported.	

Name	Description																										
	<p>Check one of the check boxes to specify a VMTP network:</p> <ul style="list-style-type: none"> <li>• Provider Network</li> <li>• External Network</li> </ul> <p>For the <b>Provider Network</b> complete the following:</p> <table border="1" data-bbox="842 535 1516 1178"> <tbody> <tr> <td data-bbox="849 541 1179 632"><b>Network Name</b> field</td> <td data-bbox="1179 541 1510 632">Enter the name for the external network.</td> </tr> <tr> <td data-bbox="849 632 1179 722"><b>Subnet</b> field</td> <td data-bbox="1179 632 1510 722">Enter the Subnet for Provider Network.</td> </tr> <tr> <td data-bbox="849 722 1179 812"><b>Network IP Start</b> field</td> <td data-bbox="1179 722 1510 812">Enter the starting floating IPv4 address.</td> </tr> <tr> <td data-bbox="849 812 1179 903"><b>Network IP End</b> field</td> <td data-bbox="1179 812 1510 903">Enter the ending floating IPv4 address.</td> </tr> <tr> <td data-bbox="849 903 1179 993"><b>Network Gateway</b>field</td> <td data-bbox="1179 903 1510 993">Enter the IPv4 address for the Gateway.</td> </tr> <tr> <td data-bbox="849 993 1179 1083"><b>DNS Server</b> field</td> <td data-bbox="1179 993 1510 1083">Enter the DNS server IPv4 address.</td> </tr> <tr> <td data-bbox="849 1083 1179 1178"><b>Segmentation ID</b> field</td> <td data-bbox="1179 1083 1510 1178">Enter the segmentation ID.</td> </tr> </tbody> </table> <p>For <b>External Network</b> fill in the following details:</p> <table border="1" data-bbox="842 1283 1516 1856"> <tbody> <tr> <td data-bbox="849 1289 1179 1379"><b>Network Name</b> field</td> <td data-bbox="1179 1289 1510 1379">Enter the name for the external network.</td> </tr> <tr> <td data-bbox="849 1379 1179 1470"><b>IP Start</b> field</td> <td data-bbox="1179 1379 1510 1470">Enter the starting floating IPv4 address.</td> </tr> <tr> <td data-bbox="849 1470 1179 1560"><b>IP End</b> field</td> <td data-bbox="1179 1470 1510 1560">Enter the ending floating IPv4 address.</td> </tr> <tr> <td data-bbox="849 1560 1179 1650"><b>Gateway</b> field</td> <td data-bbox="1179 1560 1510 1650">Enter the IPv4 address for the Gateway.</td> </tr> <tr> <td data-bbox="849 1650 1179 1740"><b>DNS Server</b> field</td> <td data-bbox="1179 1650 1510 1740">Enter the DNS server IPv4 address.</td> </tr> <tr> <td data-bbox="849 1740 1179 1856"><b>Subnet</b> field</td> <td data-bbox="1179 1740 1510 1856">Enter the Subnet for External Network.</td> </tr> </tbody> </table>	<b>Network Name</b> field	Enter the name for the external network.	<b>Subnet</b> field	Enter the Subnet for Provider Network.	<b>Network IP Start</b> field	Enter the starting floating IPv4 address.	<b>Network IP End</b> field	Enter the ending floating IPv4 address.	<b>Network Gateway</b> field	Enter the IPv4 address for the Gateway.	<b>DNS Server</b> field	Enter the DNS server IPv4 address.	<b>Segmentation ID</b> field	Enter the segmentation ID.	<b>Network Name</b> field	Enter the name for the external network.	<b>IP Start</b> field	Enter the starting floating IPv4 address.	<b>IP End</b> field	Enter the ending floating IPv4 address.	<b>Gateway</b> field	Enter the IPv4 address for the Gateway.	<b>DNS Server</b> field	Enter the DNS server IPv4 address.	<b>Subnet</b> field	Enter the Subnet for External Network.
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<b>Subnet</b> field	Enter the Subnet for External Network.																										

Name	Description												
<p><b>TLS</b> optional section, this will be visible only if TLS is selected from Blueprint Initial Setup Page.</p>	<p><b>TLS</b> has two options:</p> <ul style="list-style-type: none"> <li>• <b>External LB VIP FQDN</b> - Text Field.</li> <li>• <b>External LB VIP TLS</b> - True/False. By default this option is false.</li> </ul>												
<p><b>SwiftStack</b> optional section will be visible only if SwiftStack is selected from Blueprint Initial Setup Page. SwiftStack is only supported with <b>Keystone2</b>. If you select <b>Keystone3</b>, swiftstack will not be available to configure.</p>	<p>Following are the options that needs to be filled for SwiftStack:</p> <table border="1" data-bbox="803 661 1481 1339"> <tbody> <tr> <td data-bbox="803 661 1140 793"><b>Cluster End Point</b></td> <td data-bbox="1143 661 1481 793">IP address of PAC (proxy-account-container) endpoint.</td> </tr> <tr> <td data-bbox="803 798 1140 888"><b>Admin User</b></td> <td data-bbox="1143 798 1481 888">Admin user for swift to authenticate in keystone.</td> </tr> <tr> <td data-bbox="803 892 1140 1050"><b>Admin Tenant</b></td> <td data-bbox="1143 892 1481 1050">The service tenant corresponding to the Account-Container used by Swiftstack.</td> </tr> <tr> <td data-bbox="803 1054 1140 1211"><b>Reseller Prefix</b></td> <td data-bbox="1143 1054 1481 1211">Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack E.g KEY_</td> </tr> <tr> <td data-bbox="803 1215 1140 1272"><b>Admin Password</b></td> <td data-bbox="1143 1215 1481 1272">swiftstack_admin_password</td> </tr> <tr> <td data-bbox="803 1276 1140 1339"><b>Protocol</b></td> <td data-bbox="1143 1276 1481 1339">http or https</td> </tr> </tbody> </table>	<b>Cluster End Point</b>	IP address of PAC (proxy-account-container) endpoint.	<b>Admin User</b>	Admin user for swift to authenticate in keystone.	<b>Admin Tenant</b>	The service tenant corresponding to the Account-Container used by Swiftstack.	<b>Reseller Prefix</b>	Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack E.g KEY_	<b>Admin Password</b>	swiftstack_admin_password	<b>Protocol</b>	http or https
<b>Cluster End Point</b>	IP address of PAC (proxy-account-container) endpoint.												
<b>Admin User</b>	Admin user for swift to authenticate in keystone.												
<b>Admin Tenant</b>	The service tenant corresponding to the Account-Container used by Swiftstack.												
<b>Reseller Prefix</b>	Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack E.g KEY_												
<b>Admin Password</b>	swiftstack_admin_password												
<b>Protocol</b>	http or https												

**Note** When the Tenant type ACI/VLAN is selected then ACIINFO tab is available in blueprint setup.

**Note** When ACI/VLAN is selected then ToR switch from initial setup is mandatory.

Name	Description
APIC Hosts field	Enter host input. Example: <ip1 host1>:[port] . max of 3, min of 1, not 2;
apic_username field	Enter a string format.
apic_password field	Enter Password.
apic_system_id field	Enter input as string. Max length 8.
apic_resource_prefix field	Enter string max length 6.
apic_tep_address_pool field	Allowed only 10.0.0.0/16
multiclass_address_pool field	Allowed only 225.0.0.0/15
apic_pod_id field	Enter integer(1- 65535)
apic_installer_tenant field	Enter String, max length 32
apic_installer_vrf field	Enter String, max length 32
api_l3out_network field	Enter String, max length 32

**Note**

Name	Description
VTS Day0 (checkbox)	True or false default is false.
VTS User name	Enter as string does not contain special characters.
VTS Password	Enter password
VTS NCS IP	Enter IP Address format.
VTC SSH Username	Enter a string
VTC SHH Password	Enter password

**Note** When Tenant Type is VTS/VLAN then VTS tab is available in blueprint setup.  
 If vts day0 is enabled then SSH username and SSH password is mandatory.  
 If SSH\_username is input present then SSH password is mandatory vice-versa

- 9 If **Syslog Export** or **NFVBENCH** is selected in **Blueprint Initial Setup** Page, then **Services Setup** page will be enabled for user to view. Following are the options under **Services Setup** Tab:

Name	Description												
<b>Syslog Export</b>	Following are the options for Syslog Settings:												
	<table border="1"> <tr> <td><b>Remote Host</b></td> <td>Enter Syslog IP Address.</td> </tr> <tr> <td><b>Protocol</b></td> <td>Supports only UDP.</td> </tr> <tr> <td><b>Facility</b></td> <td>Defaults to local5.</td> </tr> <tr> <td><b>Severity</b></td> <td>Defaults to debug.</td> </tr> <tr> <td><b>Clients</b></td> <td>Defaults to ELK.</td> </tr> <tr> <td><b>Port</b></td> <td>Defaults to 514 but can be modified by the User.</td> </tr> </table>	<b>Remote Host</b>	Enter Syslog IP Address.	<b>Protocol</b>	Supports only UDP.	<b>Facility</b>	Defaults to local5.	<b>Severity</b>	Defaults to debug.	<b>Clients</b>	Defaults to ELK.	<b>Port</b>	Defaults to 514 but can be modified by the User.
	<b>Remote Host</b>	Enter Syslog IP Address.											
	<b>Protocol</b>	Supports only UDP.											
	<b>Facility</b>	Defaults to local5.											
	<b>Severity</b>	Defaults to debug.											
	<b>Clients</b>	Defaults to ELK.											
<b>Port</b>	Defaults to 514 but can be modified by the User.												
<b>NFVBENCH</b>	<p><b>NFVBENCH enable checkbox</b> by default is <b>false</b>.</p> <p>Add ToR information connect to Switch:</p> <ul style="list-style-type: none"> <li>• Select a TOR Switch and enter the Switch name.</li> <li>• Enter the port number. For Example: eth1/5 . VTEP VLANS (mandatory and needed only for VTS/VXLAN,): Enter 2 different VLANs for VLAN1 and VLAN2.</li> <li>• NIC Ports: INT1 and INT2 optional input. Enter the 2 port numbers of the 4-port 10G Intel NIC at the management node used for NFVBench.</li> </ul>												
<b>ENABLE_ESC_PRIV</b>	Enable the checkbox to set it as True. By default it is <b>False</b> .												

**Step 4** Click **Offlinevalidation**, to initiate an offline validation of the Blueprint.

**Step 5** Blueprint can also be created using an **Upload functionality**:

- In Blueprint Initial Setup.
- Click **Browse** in the blueprint initial setup.
- Select the YAML file you want to upload.
- Click **Select** button.
- Clicking on load button in the Insight UI Application. All the fields present in the YAML file would be uploaded to the respective fields in UI.



- Enter the name of the Blueprint (Make sure you enter unique name while saving Blueprints. There would be no two Blueprints with same name.)
- Click **Offline Validation**.
- If all the mandatory fields in the UI are populated, then Offline Validation of the Blueprint will start else a pop up would be visible which will inform which section of Blueprint Creation has a missing information error.
- On Validation Success of Blueprint **Save Blueprint** button will be enabled with **Cancel** button
- A pop up will be generated asking to initiate the deployment with **Blueprint Name** and the stages you need to run. On Validation Failure of Blueprint **Cancel** button will be enabled.

Once the **Offlinevalidation** is successful, **Save** option will be enabled which will redirect you to the Blueprint Management Page.

The wizard advances to the Blueprint Management page. On the Blueprint Management page you can select the recently added Inactive Blueprint and click **Install** button which is disabled by default.

A pop up will be generated asking to initiate the deployment with **Blueprint Name** and the stages you need to run.

By default all stages are selected but you can also do an incremented install.

In case of Incremented Install you should select stages in the order. For Example: If you select **Validation Stage** then the 2<sup>nd</sup> stage Management Node Orchestration will be enabled. You cannot skip stages and run a deployment.

Once you click **Proceed** the Cloud Deployment would be initiated and the progress can be viewed from "Dashboard".

**Note** Once the Blueprint is in **Active** State, the **Post-Install** features listed in Navigation Bar will changed to **Active** stage.

---

## Post Installation Features for Active Blueprint

This option is only available to a pod, which is successfully deployed. There are multiple sub-links available to manage the day-n operation of the pod. However, in many cases, Insight cross-launches the relevant services, thereby delegating the actual rendering to the individual services.

### Monitoring the Pod

VIM 2.2 uses ELK (elasticsearch, logstash and Kibana) to monitor the OpenStack services, by cross-launching the Kibana dashboard.

To cross launch Kibana, complete the following instructions:

- 
- Step 1** In the **Navigation** pane, click **POST-Install > Monitoring**. The **Authentication Required** browser pop up is displayed.
  - Step 2** Enter the **username** as admin.
  - Step 3** Enter the **ELK\_PASSWORD** password obtained from `/root/installer-<tagid>/openstack-configs/secrets.yaml` in the management node.

Kibana is launched in an I-Frame

**Note** Click [Click here to view Kibana logs in new tab](#) link to view Kibana Logs in a new tab.

---

## Cross Launching Horizon

Horizon is the canonical implementation of Openstack's Dashboard, which provides a web based user interface to OpenStack services including Nova, Swift and, Keystone.

---

- Step 1** In the Navigation pane, click **Post-Install > Horizon**.
- Step 2** Click [Click here to view Horizon logs in new tab](#).  
You will be redirected to Horizon landing page in a new tab.
- 

## NFVI Monitoring

NFVI monitoring is a Cross launch browser same as Horizon. NFVI monitoring link is available in the post install only if the setupdata has NFVI Monitoring configuration during the cloud deployment which basically pings the monitoring and checks status of **Collector VM1 Info** and **Collector VM2 Info**.

---

- Step 1** In the **Navigationpane**, click **Post-Install >NFVI monitoring**.
- Step 2** Click the link [Click here to view NFVI monitoring..](#)  
You will be redirected to NFVI monitoring page
- 

## Run VMTP

Run VMTP is divided in two sections:

- **Results for Auto Run:** This will show the results of VMTP which was run during cloud deployment (Blueprint Installation).
- **Results for Manual Run:** Here you have an option to run the VMTP on demand. To run VMTP on demand just click **Run VMTP** button.



**Note** If VMTP stage was skipped/not-run during Blueprint Installation, this section of POST Install would be disabled for the user.

---

## Run CloudPulse

Endpoints Tests:

- 1 cinder\_endpoint
- 2 glance\_endpoint
- 3 keystone\_endpoint
- 4 nova\_endpoint
- 5 neutron\_endpoint
- 6 all\_endpoint\_tests

Operator Tests:

- 1 rabbitmq\_check
- 2 galera\_check
- 3 ceph\_check
- 4 node\_check
- 5 docker\_check
- 6 all\_operator\_tests

## Run NFV Bench

One can **Run NFV Bench** for **BandC** series Pod, through Cisco VIM Insight. On a pod running with CVIM 2.2, click on the NFVBench link on the NAV-Menu.

You can run either fixed rate test or NDR/PDR test. As the settings and results for the test types differ, the options to run these tests are presented in two tabs, with its own settings and results .

### NDR/PDR Test

**Step 1** Log-in to **CISCO VIM Insight**.

**Step 2** In the **Navigation** pane, click **Post-Install >Run NFV Bench**.

**Step 3** Click on NDR/PDR test and complete the following fields

Name	Description
Iteration Duration	Select duration from 10 to 60 sec. Default is 20 sec
Frame Size	Select the correct frame size to run
Run NDR/PDR test	Click on Run NDR/PDR test. Once NDR/PDR test is finished it will display each type of test with its own settings and results.

## Fixed Rate Test

- Step 1** Log-in to **CISCO VIM Insight**.
- Step 2** In the **Navigation** pane, click **Post-Install >Run NFV Bench**.
- Step 3** Click Fixed rate test and complete the following fields.

Name	Description
Rate	Rate: Select right configuration pps or bps from drop down-list and enter values : For pps: minimum: 2500pps; maximum: 14500000pps (=14.5Mpps); default: 1000000pps (=1Mpps) For bps: minimum: 1400000bps; maximum: 10000000000bps (=10Gbps); default: 1000000000 (=1Gbps)
Iteration Duration	Select duration from 10-60Sec. Default is 20sec.
Frame Size	Select the right frame size(64,IMIX,1518) to run.
Run Fixed rate test	Click on Run Fixed rate test. Once Fixed rate test is finished it will display each type of test with its own settings and results.

## POD Management

One of the key aspects of Cisco VIM is that it provides the ability for the admin to perform pod life-cycle management from a hardware and software perspective. Nodes of a given pod corrupts at times and VIM provides the ability to add, remove or replace nodes, based on the respective roles with some restrictions.

Details of pod management will be listed in the admin guide, however as a summary the following operations are allowed on a running pod:

- 
- Step 1** **Add or Remove Storage Nodes:** You can add one node at a time, given that we run Ceph as a distributed storage offering.
- Step 2** **Add or Remove Computes Nodes:** N-computes nodes can be replaced simultaneously; however at any given point, at least one compute node should be active.
- Step 3** **Replace Control Nodes:** We do not support double fault scenarios, replacement of one controller at a time is supported.
- 

## System Update

As part of the lifecycle management of the cloud, VIM has the ability to bring in patches (bug fixes related to code, security, etc.), thereby providing the additional value of seamless cloud management from software perspective. Software update of the cloud is achieved by uploading a valid tar file following initiation of a System Update from the Insight as follows:

- 
- Step 1** In the Navigation pane, click **Post-Install > System Update**.
- Step 2** Click **Browse** button.
- Step 3** Select the valid tar file.
- Step 4** Click **Open > Upload and Update** .
- Message stating System Update has been initiated will be displayed. Logs front-ended by hyperlink would be visible in the section below before Update Logs to help see the progress of the update. During the software update, all other pod management activities will be disabled. Post-update, normal cloud management will commence.
- 

## Reconfiguring CIMC Password through Insight

Update the cimc\_password in the CIMC-COMMON section, and/or the individual cimc\_password for each server and then run the update password option.

To update a password, you need to follow the password rules:

- Must contain at least one lower case letter.
- Must contain at least one upper case letter.
- Must contain at least one digit between 0 to 9.
- One of these special characters !\$#@%^\_+\*=&
- Your password has to be 8 to 14 characters long.

### Before You Begin

You must have a C-series pod up and running with Cisco VIM to reconfigure CIMC password.



**Note** Reconfigure CIMC password section would be disabled if the pod is in failed state as indicated by ciscovim install-status.

**Step 1** Log-in to **CISCO VIM Insight**.

**Step 2** In the navigation pane, select **Post-Install**

**Step 3** Click **Reconfigure CIMC Password**.

**Step 4** On the Reconfigure CIMC Password page of the Cisco VIM Insight, complete the following fields:

Name	Description
CIMC_COMMON old Password	CIMC_COMMON old password field cannot be edited.
CIMC-COMMON new Password	Enter new CIMC-COMMON password. Password should be alphanumeric according to the password rule.
Click <b>Update Password</b>	Old CIMC-COMMON password will be updated with new CIMC-COMMON password.

## Reconfiguring OpenStack Password

Cisco VIM has been designed with security to accommodate customers' password policy.

There are two options to regenerate the Password:

- 1 Regenerate all passwords:** Click the checkbox of **Regenerate all passwords** and click **Set Password**. This will automatically regenerate all passwords in alphanumeric format.
- 2 Regenerate single or more password:** If user wants to set a specific password for any service like Horizon's ADMIN\_USER\_PASSWORD they can add it by doing an inline edit. Double click on the field under Password and then enter the password which will enable **Set Password** button.



**Note** During the reconfiguration of password, all other pod management activities will be disabled. Post-update, normal cloud management will commence.

## Reconfiguring OpenStack Services, TLS certs and ELK configurations

Cisco VIM supports the reconfiguration of OpenStack log level services, TLS certificates, and ELK configuration. Listed below are the steps to reconfigure the OpenStack and other services:

- 
- Step 1** In the **Navigation** pane, click **Post-Install > Reconfigure OpenStack Config**.
- Step 2** Click on the specific item to be changed and updated; For TLS certificate it is the path to certificate location.
- Step 3** Enter **Set Config** and the process will commence.  
During the reconfiguration process, all other pod management activities will be disabled. Post-update, normal cloud management will commence.
- 

## Reconfiguring Optional Services

Cisco VIM offers optional services such as heat, migration to Keystone v3, NFVBench, NFVIMON and so on, that can be enabled as post-pod deployment. Optional services can be un-configured as post-deployment in 2.2 feature. These services can be enabled in one-shot or selectively. Listed below are the steps to enable optional services:

- 
- Step 1** In the **Navigation** pane, click **Post-Install > Reconfigure Optional Services**.
- Step 2** Choose the right service and update the fields with the right values.
- Step 3** Enter **Reconfigure** to commence the process.  
During the reconfiguration process, all other pod management activities will be disabled. Post-update, normal cloud management will commence. Once reconfigure is initiated than optional feature would be updated in active blueprint. If reconfigure of Optional Services fail in the time of reconfigure process then it is advised to contact CiscoTAC to resolve the situation through CLI.

**Note** All reconfigure operation feature contains repeated deployment true or false.

- Repeated re-deployment true - Feature can be re-deployed again.
- Repeated re-deployment false- Deployment of feature allowed only once.

### Deployment Status :

Optional Features	Repeated re-deployment Options
APICINFO	True
EXTERNAL_LB_VIP_FQDN	False
EXTERNAL_LB_VIP_TLS	False

Optional Features	Repeated re-deployment Options
INSTALL_MODE	True
LDAP	True
NETWORKING	True
NFVBENCH	False
NFVIMON	False
PODNAME	False
PROVIDER_VLAN_RANGES	True
SWIFTSTACK	True
SYSLOG_EXPORT_SETTINGS	False
TENANT_VLAN_RANGES	True
TORSWITCHINFO	False
VIM_ADMIN	True
VMTP	False
VTS_PARAMETERS	False
AUTOBACKUP	True
Heat	False
Keystone v3	False
HTTP Proxy Server	True
HTTPS Proxy Server	True

## Pod User Administration

Cisco VIM Insight offers Users (Pod Admin(s) or Pod Users) to manage Users and roles associated with them.



## Managing Users

To add new User

- Step 1** Click **Login as POD User**.
- Step 2** Navigate to **POD User Administration**.
- Step 3** Click **Manage Users**.
- Step 4** Click **Add Users** to add a new user.
- Step 5** Complete the following fields in the **Add Users** page of the Cisco VIM Insight:

Field Name	Field Description
<b>Email ID</b>	Enter the Email ID of the User.
<b>User Name</b>	Enter the User Name if the User is new. If the User is already registered to the Insight the User-Name gets auto-populated.
<b>Role</b>	Select the Role from the drop-down list.

- Step 6** Click **Save**.

## Managing Roles

To create a new Role

- Step 1** Click **Login as POD User**.
- Step 2** Navigate to **Pod User Administration** and click **Manage Roles**. By default you will see full-pod-access role in the table.
- Step 3** Click **Add Role** to create a new role.
- Step 4** Complete the following fields in the **Add Roles** page in Cisco VIM Insight:

Field Name	Field Description
<b>Role</b>	Enter the name of the role.
<b>Description</b>	Enter the description of the role.
<b>Permission</b>	Check the <b>Permission</b> checkbox to select the permission.

- Step 5** Click **Save**. Once the Blueprint is in Active state all the permissions are same for C-series and B-series Pods other than Reconfigure CIMC Password which is missing for B-series Pod.

**Note** Permissions are divided in granular level where viewing **Dashboard** is the default role that is implicitly added while creating a role.

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## Managing Root CA Certificate

You can update the CA Certificate during the registration of the POD. Once, logged in as POD User and if you have the permission to update the certificate you can view under POD User Administration>> Manage Root CA Certificate.

To update the Certificate:

---

**Step 1** Click **Login as POD User**

**Step 2** Navigate to **POD User Administration>>Manage Root CA certificate**.

**Step 3** Click **Browse** and select the certificate that you want to upload.

**Step 4** Click **Upload**.

- If the certificate is Invalid, and does not matches with the certificate on the management node located at (var/www/mercury/mercury-ca.crt) then Insight will revert the certificate which was working previously.
- If the Certificate is valid, Insight will run a management node health check and then update the certificate with the latest one.

**Note** The CA Certificate which is uploaded should be same as the one which is in the management node.

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